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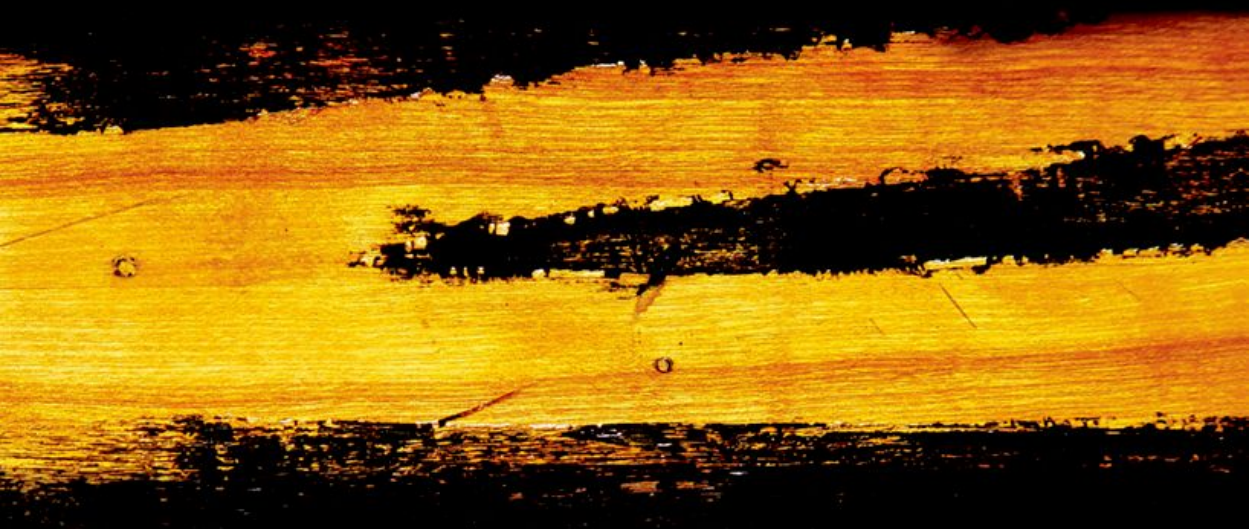

THE COHERENCE OF THEISM

Second Edition

RICHARD SWINBURNE

The Coherence of Theism

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Richard Swinburne

SECOND EDITION

OXFORD
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Preface to the Second Edition

The Coherence of Theism, first published in 1977, is concerned with the meaning and internal coherence of the claim that there is a God. It proved to be the first volume of a trilogy on theism, together with *The Existence of God* (1979), which analyses the strength of arguments for and against the existence of God, and *Faith and Reason* (1981), which considers the relevance of arguments to religious faith. An extensively rewritten 'second edition' of *The Existence of God* was published in 2004, and an extensively rewritten 'second edition' of *Faith and Reason* was published in 2005. There was a 'revised edition' of *The Coherence of Theism* in 1993, but the revisions were relatively minor. The present volume constitutes a far more extensive revision, and so also deserves the name of a 'second edition'.

While the structure and main conclusions remain the same as in the first edition, I have largely rewritten the text in order to take account of recent discussions of its topics and of topics in other areas of philosophy relevant to them, to bring my terminology into line with that used in my own later writings and in philosophy more generally, and to defend some relatively minor changes in my own views. The most important recent discussions of the topics of this book have concerned the analysis of omnipotence, and the Molinist solution to the problem of reconciling God's foreknowledge and human freedom, and I have reacted to these in Chapters 9 and 10. The most important discussions of topics in other areas of philosophy are those concerning 'metaphysical possibility'. Philosophers have come to recognize that there are propositions that are logically possible, but are nevertheless impossible in as strong a sense as logically impossible propositions; and many philosophers have called all such propositions which are impossible in that strong sense 'metaphysically impossible'. It follows that my concern with the 'coherence' of theism must be a concern, not merely with its logical possibility, but with its metaphysical possibility. I have restructured Chapters 2 and 3, so that Chapter 3 is a short chapter devoted to metaphysical possibility; and I make it clear there why—despite the general importance of this distinction—almost all the propositions with which I am concerned in

this book are such that, if they are logically possible, they are also metaphysically possible. Thereafter I discuss only the logical possibility of propositions except in a few cases to which I draw attention, where the metaphysically possible may diverge from the logically possible. I have brought my terminology into line with that used elsewhere by using 'divine' rather than 'a personal ground of being' to characterize the nature of God, distinguishing a sentence being 'analytic' from it being 'logically necessary', and describing what sentences express as 'propositions' rather than 'statements'.

The changes in my own views include my recognition (justified in the 1993 edition) that my account of the divine nature is straightforwardly compatible with the Christian doctrine of the Trinity (and does not require Christians to say that there can be three divine 'persons' only in a very stretched sense of 'person'.) Except for repeating my arguments for this compatibility, I do not discuss that doctrine further here, since I discuss it at length in my book *The Christian God*. I have a more thoroughly developed theory of the nature of moral propositions, which I provide in Chapter 11. Also, I have developed the idea that God might be a 'necessary being' in a considerably deeper sense than I allowed in 1977, though not (in the normal contemporary sense) a 'metaphysically necessary being'. In view of all the new material that I have added, I have kept the book at approximately the same length by abbreviating and sometimes omitting passages that are not so central to the main argument or that deal with issues that are not nearly as controversial now as they were in the twentieth century. For example, I have reduced radically the discussion of verificationism in Chapter 2, since, in view of the decline of the influence of verificationism in philosophy generally, the view that religious language ought to satisfy a verificationist criterion of meaning no longer has much appeal. Having transferred the discussion of kinds of necessity from Chapter 13 to Chapters 2 and 3, I have expanded the discussion of the necessity in and of God over two chapters, 13 and 14—which required me to give a new title to Chapter 13.

Many thanks to all the philosophers whose comments and criticisms of papers containing previous versions of some of the arguments of this book have saved me from many mistakes. Some of the new material comes from six new published articles—'Gregory Palamas and our Knowledge of God', in A.Schumann (ed.), *Logic in Orthodox Christian Thinking* (Ontos Verlag, 2013); 'Time and Causation', *American*

Philosophical Quarterly, 51 (2014), 233–45; 'Could God be a Necessary Being?', in Jon Kvanvig (ed.), *Oxford Studies in the Philosophy of Religion*, vol. 6 (Oxford University Press, 2015); 'Necessary Moral Principles', *Journal of the American Philosophical Association*, 1 (2015) 617–34; 'God's Omnipotence', in B. Göcke (ed.), *Infinite Properties* (University of Notre Dame Press, forthcoming); 'Causation, Time, and God's Omniscience', *Topoi*, forthcoming. (I should add that the view about God's necessity that I reach in this present book is somewhat different from that reached in the article 'Could God be a Necessary Being?') Also, I have reused a few passages from other books of mine that discuss issues discussed also in the present book—passages from *Mind, Brain, and Free Will* (Oxford University Press, 2013), from *Revelation* (2nd edn, Oxford University Press, 2007), and from *The Christian God* (Oxford University Press, 1994). I am grateful to the editors and publishers concerned for permission to reuse the material. Thanks once again to Sarah Barker for typing and retyping the new material, and once again to Peter Momtchiloff for ushering a book of mine through Oxford University Press.

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1

Introduction

By 'theism' I understand the doctrine that there is a God in the sense of a being with most of the following properties: being a person without a body (that is, a spirit), present everywhere (that is, omnipresent), the creator of the universe, perfectly free, able to do anything (that is, omnipotent), knowing all things (that is, omniscient), perfectly good, a source of moral obligation, eternal, a necessary being, holy, and worthy of worship. There are different forms of theism, according to which of the above properties are ascribed to God, and how those properties are understood. Christians, Jews, and Muslims are all in the above sense theists. Many theists also hold further beliefs about other properties possessed by God, and in respect of these properties Christians, Jews, and Muslims differ among themselves; and yet further beliefs, in which some members of each group differ from others. Christians assert, and Jews and Muslims deny, that God became incarnate in Jesus Christ. Catholics assert, and Protestants deny, that Christ is 'really' present in the bread and wine consecrated in the Mass. With beliefs of the latter two kinds this book is not concerned. It is concerned solely with the central core of theistic belief, that God (in the sense defined above) exists, that there is a God. It is not concerned primarily with whether this belief is true or with whether we can know it to be true, but with the prior question of which of the many forms of theism are coherent.

Here is a very brief account of what it is for a proposition to be 'coherent'; a much fuller and more rigorous account (with several more examples) will follow in Chapters 2 and 3. A declarative sentence is one that expresses a proposition about how things are or were or will be; declarative sentences are to be distinguished from commands or questions. 'The Battle of Hastings took place in 1066 CE' states that there was a battle called 'The Battle of Hastings' and that it took place in a certain year, 1066 CE. One may have various attitudes towards a

proposition—one may believe it, or doubt it, or desire it to be true. But in normal contexts, when a declarative sentence is uttered or written without being enclosed within a larger sentence (as, for example, in 'I doubt whether the Battle of Hastings took place in 1066 CE'), it is being asserted; the speaker or writer is making a claim that the proposition is true. But while expressing a proposition, a sentence may not express a coherent proposition.

The main way in which a proposition can be incoherent is if it is logically impossible—that is, it is such that it does not make any sense to suppose that that proposition is true, and that will be because it is self-contradictory or entails a proposition that is self-contradictory. By a self-contradictory proposition (which I shall call in future simply a 'contradiction') I mean a proposition of the form 'both *p* and not-*p*'—for example 'John is over 6 foot tall and also not over 6 foot tall'. By a proposition *p* entailing a different proposition *q*, I mean that the meaning of *p* is such that it could not be true unless *q* were true: someone who asserts '*p*' is (explicitly or implicitly) committed thereby to '*q*'. For example, 'John is under 5 foot tall' entails 'John is under 6 foot tall'. It may often be obvious that some proposition entails a contradiction and so is logically impossible merely by reflecting on the meanings of the words of any sentence that expresses it and the way in which those words are put together (the form of the sentence). It is obvious that 'my box is a cube with all its edges 6 foot long which is simultaneously in Oxford and a hundred miles away', or 'John is taller than James, James is taller than George, and George is taller than John', entail contradictions. But sometimes it may require much reflection and argument to show that some proposition entails a contradiction; and I shall consider in Chapter 2 the kinds of reflection and argument needed to show that.

I shall go on to point out in Chapter 3 that there are some propositions that are such that, even when we know what the sentences that express them mean, it requires empirical investigation to discover what it would be like for them to be true. Some of these propositions are such that, when we do come to understand this, we can see that they could be true only if some other logically impossible proposition were true. So they are just as strongly impossible as are logically impossible propositions. I shall call these propositions 'a posteriori metaphysically impossible' propositions; and I shall call both these propositions and logically impossible propositions 'metaphysically impossible' propositions. All metaphysically

impossible propositions are incoherent. We can come to know that a proposition is logically impossible a priori (that is, merely by reflecting on what some sentence that expresses it means and what is entailed by that sentence.) But, as their name indicates, we can come to know that a posteriori metaphysically impossible propositions are metaphysically impossible only a posteriori—that is by acquiring some information, not merely about the meanings of words, but also about the world to which the words refer.

In summary, a proposition is incoherent iff in some way it 'involves' a contradiction, and so is not true and could not be true, in whatever conceivable way the world was different from the actual world. ('Iff' means 'if and only if'.) I understand by a coherent proposition one that is metaphysically possible. Coherent propositions may be true or false; they may be such that they must be true, however the world differed in any conceivable way from the way it actually is—as is 'all squares have four sides' (in which case they are 'metaphysically necessary') or such that whether they are true ('David Cameron was Prime Minister in 2014') or false ('George Osborne was Prime Minister in 2014') depends on how the world is (was, or will be).

This book is concerned with sentences that say that there exists a being with one or more of the properties listed in the first sentence of this chapter, possessed by him either contingently or necessarily (that is, essentially). Such sentences are 'There is a holy being, creator of the universe', or 'an omnipotent and eternal spirit exists', or 'God exists', where 'God' is defined in terms of some or all of the above properties. (Until I reach Chapter 14, I shall always understand 'God exists' as meaning the same as 'There is a God', a being of a certain kind. I shall not understand 'God' as the proper name of a certain individual.) Such sentences I will term creedal sentences. Some philosophers of recent years, especially ones writing in the middle years of the twentieth century, have argued that, despite appearances, these sentences are not declarative sentences, but rather expressions of intention to live in a certain way or exhortations to others to pursue a certain course of life. In Chapter 6 I shall very briefly consider and reject such accounts of creedal language, and I will argue that creedal sentences do, as they appear to do, express propositions.

Many other philosophers of recent years, while agreeing that creedal sentences express propositions, have argued that many such sentences

(or conjunctions of sentences) do not express coherent propositions, because it is incoherent to suppose that things are as described by them. For example, they have claimed that it is incoherent to claim both that God is essentially (that is, in some sense necessarily) both omnipotent and perfectly free, and also essentially perfectly good; since, their argument goes, if he were both omnipotent and perfectly free, he would be able to do evil, and if he were essentially perfectly good, he would not be able to do evil. This book is devoted to examining the different propositions (including the ones just mentioned) that may be expressed by creedal sentences and so the different propositions that may be expressed by the sentence 'God exists', and to reach conclusions about which such creedal propositions are coherent ones—that is, ones that do not involve any contradiction—and which ones are incoherent. Although, as I wrote above, the book is not concerned primarily with whether the belief that there is a God is true or with whether we can know it to be true, it will, however, reach the conclusion that the question of the coherence of a traditional form of theism cannot altogether be separated from the question of its truth.

I consider in Part I general questions about how theological language works. In Chapters 2 and 3 I investigate the conditions that need to be satisfied for a sentence to express a coherent proposition. I go on in Chapters 4 and 5 to analyse different general accounts of how words used to describe what God is like mean what they do. The words used to describe what God is like are all ordinary words or technical theological terms defined by ordinary words. On one account of religious language the ordinary words are used in their ordinary senses, while on a different account they are used in 'analogical' senses. I shall be arguing in the course of the book that, while some creedal propositions can be expressed by sentences using words in ordinary senses, other creedal propositions can be expressed only by sentences that use words in analogical senses.

Having thus examined very general problems about the view that creedal sentences express coherent propositions, I turn in Parts II and III to investigate in detail the various propositions expressed by creedal sentences. In Chapter 7 I consider whether it is coherent to claim that there exists a non-embodied person, a spirit, who is omnipresent (that is, present at every place.) In Chapter 8 I consider whether it is coherent to suppose that there exists an omnipresent spirit who is perfectly free and

created and sustains the universe. And so on. In the case of each new property examined I consider whether it is coherent to suppose that a being could have that property as well as the other properties previously examined. The conclusion of Part II is that it is coherent to suppose that 'there exists eternally an omnipresent spirit, who is perfectly free, the creator of the universe, omnipotent, omniscient, perfectly good, and a source of moral obligation', when all of these words or the words by which they are defined are understood in ordinary senses—given certain definitions of these words rather than other definitions.

The God of Part II is, however, a contingent God. If he exists, he just happens to exist and happens to have most of the above properties; it would be a fortunate accident if he does. He might not have existed or might not have possessed exactly those properties. However, writers in the Judaeo-Christian–Islamic tradition who have thought about their theism in any depth have wanted to deny that God just happens to exist or just happens to have such properties as those listed above. They have wanted to claim that in some sense of 'necessarily' God exists necessarily and has most of the above properties necessarily. In Part III I investigate these claims. I find that it could be coherent to suppose that there exists—in certain senses of 'necessary' and 'necessarily'—a necessary being who has necessarily the properties considered in Part II, but only if that being is supposed to be a 'person' and to be the 'cause' of his own existence only in analogical senses of those words. If those words are being used in analogical senses, I cannot prove for certain that any proposition that there exists such a God is or is not coherent. I can only indicate the considerations which are relevant to showing the coherence or incoherence of such a proposition. My main conclusion will be that it is probable that any such proposition is coherent iff it is somewhat more probable on observable evidence that—if that proposition is coherent—it is true. Whether (and to what degree) a proposition affirming the existence of such a God is—if coherent—probably true on the observable evidence available to us is a question that lies outside the scope of this book, but that I examine in the second volume of the trilogy, *The Existence of God*. Normally we can show a proposition to be coherent without having to produce any grounds for supposing it to be true. Not so for the propositions considered in Part III.

Although the overall topic of this book lies squarely within the field of the philosophy of religion, I have found it necessary, in order to answer

the questions with which I am concerned, to write lengthy sections on many general philosophical topics and then apply the results to the claims of theism. There are detailed discussions of such topics as logical possibility, personal identity, causation, and the objectivity of morality—topics generally considered to lie within areas of philosophy other than the philosophy of religion. I have tried to discuss these topics in ways that do not presuppose previous acquaintance with current philosophical discussions; and I refer from time to time to books and articles where the issues may be followed up more fully.

The programme of this book, if not its results, will seem a natural and useful one to many interested in philosophy and lacking religious commitment. They rightly feel that bold and puzzling claims about the universe that command some measure of support need to be put under the philosophical microscope. Yet many religious people will view this programme with grave suspicion. Religion, they will tell us, is a matter not of affirming creeds, but of a personal relationship to God. The religious person may tell us that she knows that she at any rate has such a relationship, and that she knows what she means when she says that she has this relationship; on these points she 'cannot be mistaken'. In reaction to this suspicion, I have two points to make. The first point is that, although the religious person claims to know that she has a personal relationship to God, many people have claimed to know things about which they have subsequently been found to be confused or mistaken. If large numbers of people are very sceptical about some claim that you make to knowledge of a very important matter, it is no bad thing to check your claim by considering whether their objections provide you with grounds for sharing their scepticism. And a major objection to the claim that there is a God is the objection that the claim is simply incoherent and so could not be true. The second point is that, even if the religious person has no need to question the truth, let alone the coherence, of her beliefs and of the claim that she has a personal relationship to God, she has, at any rate on Christian and Islamic views, a duty to convert others. If those others are to come to believe that there is a God, they need to have explained to them what the theist's claims mean. They often doubt the coherence of these claims. If the religious person could show the claims to be coherent, she would remove a stumbling-block that stands in the way of the conversion of the unbeliever.

Questions about the nature of God and whether such a God exists can, like all big questions, be answered at different levels of sophistication. A simple answer to a young child's question 'What does "God is omnipotent" mean?' would be 'it means "God can do anything"'. A slightly more sophisticated answer to the same question from a somewhat older child would be 'God can do anything, the description of which does not entail a contradiction', and it would go on to explain what 'entail' and 'contradiction' mean, and then illustrate this by examples of what God can and cannot do—as, for example, 'he cannot make me exist and not exist at the same time'. The answer to be given in Chapter 9 of the present book is both longer and more sophisticated than either of these answers. This book seeks to answer such questions at a level at which fairly intelligent and well-educated people, prepared to concentrate on some somewhat complicated arguments, can understand.

I concluded my Introduction to the first edition of this book with these sentences:

> It is one of the intellectual tragedies of our age that when philosophy in English-speaking countries has developed high standards of argument and clear thinking, the style of theological writing has been largely influenced by the continental philosophy of Existentialism, which, despite its considerable other merits, has been distinguished by a very loose and sloppy style of argument. If argument has a place in theology, large-scale theology needs clear and rigorous argument. That point was very well grasped by Thomas Aquinas and Duns Scotus, by Berkeley, Butler, and Paley. It is high time for theology to return to their standards.

While I was mistaken in focusing my criticism of continental philosophy merely on its Existentialist variant, I maintain my criticism of the influence possessed by continental philosophy generally, on 'systematic theology' as taught in most faculties of Theology. This influence is, I am glad to report, less than it was in 1977, but still dominant. By contrast, there has been a remarkable growth of interest in rigorous treatment of religious claims among so-called analytic philosophers—that is, philosophers of the English-speaking world whose style of philosophy is now spreading to many other countries. When published in 1977, *The Coherence of Theism* was the first book in the new analytic philosophy of religion tradition to attempt a detailed account of the meaning and coherence of theism. Over the subsequent nearly forty years there have been quite a number of other books that have had the same programme, some of them reaching conclusions not greatly different from mine,

others purporting to show that most forms of theism are incoherent—that is, that possession of some of the purported divine properties is incompatible with possession of other such properties. And there have been many books, and very many articles in academic journals, on individual divine properties—such as omnipotence, omniscience, and perfect goodness. Unfortunately, some of this writing is couched in difficult philosophical terminology with the aid of much formal logic. Sometimes it is necessary to use such terminology, but in such a case it is crucially important to bring out by sentences of ordinary non-technical language what is the philosophical claim being made, and to make sense of what it would be like for that claim to be true. If this is not be done, the philosophical terminology may be hiding nonsense. Of course, if there is a God of the kind postulated by theists, humans will not be able to understand in any way fully what he is like; but, if we cannot understand at all what he is like, there would be no difference between a theist and an atheist, and no point in worshipping God.

The medieval philosophers who also produced complicated accounts of the divine properties recognized that in doing so they were using and needed to use words in analogical senses. Aquinas, for example, wrote that God is 'good' or 'wise' only in analogical senses of these words. The medievals then went on to produce accounts of the nature of analogy, in order to justify their claims that their use of words to talk about God was a comprehensible use of words in analogical senses. It is, therefore, strange that there has been so little discussion in the recent literature of analytic philosophy of religion of the nature and permissible use of analogy. By contrast, the present book begins with a full discussion of the nature and justification of the analogical use of words. Although I do not think that Aquinas gave us a very useful account of analogy, I do think that theology does use words in an analogical sense in a different sense of 'analogy' from that of Aquinas, and that it needs to do so in crucial places in order to talk coherently about God.

PART I

Religious Language

2

Conditions for Coherence:
Logical Possibility

Definitions

In the next two chapters I shall analyse the criteria that must be satisfied for a sentence to express a coherent proposition. I begin by describing the senses in which I shall understand the crucial philosophical expressions used in this analysis. And I begin this latter task by repeating and amplifying some of the definitions given in Chapter 1. A proposition is incoherent (that is, metaphysically impossible) iff in some way it involves a contradiction; and coherent (that is, metaphysically possible) iff it does not in any way involve a contradiction and so is true or could be true if the world were different in some conceivable way from the way it is; a metaphysically necessary proposition is one that is true, and would still be true, however different in any conceivable way the world was from the way it is. The main kind of metaphysically possible/impossible/necessary proposition is a logically possible/impossible/necessary proposition, which is one expressed by a logically possible/impossible/necessary sentence. A logically impossible sentence is a declarative sentence that must be false in virtue of purely a priori considerations; that is, a sentence that is such that, merely because of what it means in virtue of the rules of the language in which it is expressed, it entails a contradiction. A logically possible sentence is a declarative sentence that is not logically impossible. A logically necessary sentence is a declarative sentence that must be true in virtue of purely a priori considerations, because its negation (the sentence 'not-*p*' which says of it (*p*) that it is not true) entails a contradiction because of what the sentence means in virtue of the rules of the language in which it is expressed. A metaphysically impossible proposition is therefore either a logically impossible proposition or any

proposition that is as strongly impossible as a logically impossible proposition. We shall see in Chapter 3 that the reason why a proposition could be metaphysically impossible but not logically impossible is that, although it does not itself entail a contradiction, it could be true only if some different logically impossible proposition was true, and so it too in a wide sense 'involves' a contradiction. A metaphysically possible proposition is one that is not metaphysically impossible.

A metaphysically necessary proposition is either a logically necessary proposition or one that is as strongly necessary as a logically necessary proposition. We shall see in Chapter 3 that the reason why a proposition could be metaphysically necessary but not logically necessary is that, although its negation does not itself entail a contradiction, that negation could be true only if some different logically impossible proposition was true, and so that negation too in a wide sense 'involves' a contradiction. A metaphysically possible proposition that is not metaphysically necessary is metaphysically contingent—that is, it is neither necessary nor impossible; and a logically possible proposition that is not logically necessary is logically contingent.

I shall use 'conceivable' in the same sense as 'logically possible'; a 'conceivable' proposition is one that it makes sense to suppose could be true.[1] To 'conceive' some proposition is to suppose that proposition, which does not entail a contradiction, to be true. To suppose a proposition to be true is not the same as to imagine it being true, in the sense of visualizing it in one's mind. Humans cannot (in this sense) imagine a figure having a thousand sides or a block of iron being solid, in that we cannot have a mental image of a thousand sides or of the solidity of the iron. (A block of iron with holes inside it would look the same as a solid block.) But we can conceive there being such things, because we can suppose there to be such things, without that supposition entailing a contradiction. It makes sense to suppose that there could be such things as a thousand-sided figure or a

[1] Hence some state of affairs is apparently conceivable if it seems to be logically possible, if it seems to make sense to suppose that it is true. Sometimes 'conceivable' is used to mean 'apparently logically possible' or 'apparently metaphysically possible'; I shall not use it in either of these senses. In understanding 'logical possibility' as 'conceivability' I am giving an account of logical possibility similar to that of David Chalmers, 'Does Conceivability Entail Possibility?', in T. S. Gendler and J. Hawthorne (eds), *Conceivability and Possibility* (Oxford University Press, 2002). See also S. Yablo, 'Is Conceivability a Guide to Possibility?', *Philosophy and Phenomenological Research*, 53 (1993), 1–14.

solid block of iron. What we can conceive is conceivable. But a proposition that some particular person cannot conceive, because he or she does not fully understand what it would be like for it to be true, may be conceivable because any person who does fully understand this can suppose it to be true without contradiction; but what is inconceivable cannot be conceived by anyone. In this chapter I proceed to analyse in more detail what it is for a sentence to be logically possible (that is, conceivable), and so to express a logically possible proposition.

A sentence is a string of words that have senses, strung together so as to have a meaning. (Rules of grammar codify the ways in which words can be put together so that the whole string has a meaning. For example, a sentence must contain a verb, and any adverbs must qualify verbs and not stand in the subject place.) A sentence is a sentence of a particular language—French, or English, or Latin, or whatever. The forms of declarative sentences include subject–predicate sentences such as 'John is bald', universal generalizations such as 'all humans are mortal', conditional sentences such as 'if John has finished writing his report, he will come to dinner', and other forms that grammarians and logicians have codified. Words and sentences of a language mean what some large group of its speakers mean by them. If there are two or more large groups of speakers that mean different things by some word or sentence, then the word or sentence is ambiguous. In the case of technical terms of a discipline, it is the experts of that discipline whose use determines the sense of its terms—it is physicists whose use determines what 'quark' means.

A token sentence is a particular utterance or inscription of a sentence on a particular occasion. Any token sentence consisting of the same words in the same order is a token of the same type sentence. Thus each utterance or inscription of 'all humans are mortal' is a different token of the same type. As I shall use the word 'proposition' in this book,[2] a proposition is the proposition it is in virtue of the meaning of the type sentence that expresses it, and of the truth conditions—that is, which state of affairs would make it true—of the token sentence that

[2] This seems to me the sense in which most philosophers use the word 'proposition' today, although sometimes they use 'statement' and 'thought' in this sense. In another book of mine (*Revelation* (2nd edn, Oxford University Press, 2007)) it was important for me to make a certain distinction that is not so important for this book, and so I used 'thought' in the sense in which I am using 'proposition' here; and used 'proposition' in a different sense.

expresses it. The type sentence 'The Prime Minister is young' means that a prime minister to whom it refers is young; the token of that sentence uttered by me today has, as its truth conditions, that David Cameron (the Prime Minister to whom I am referring in this utterance) is young. By the 'meaning' of a (type or token) sentence, I mean what you would know in knowing the criteria determining under what conditions it would be true. To know these criteria always involves knowing to which other sentences anyone who asserts the given sentence is thereby explicitly committed by it. I call these commitments to which a speaker is explicitly committed by a sentence its 'mini-entailments'; '*p*' mini-entails '*q*' iff someone who asserts '*p*' thereby explicitly commits himself to '*q*'. 'John is older than James' mini-entails 'James is younger than John'; 'he is over 6 feet tall' mini-entails 'he is over 5 feet tall'. So if *p* mini-entails *q*, someone who sincerely utters the sentence '*p* but not *q*' would not have fully understood either what '*p*' means or what '*q*' means, since that sentence could not but be false. But knowing the criteria determining the truth conditions of a sentence may also involve being able to recognize, when you are favourably positioned, your faculties are working properly, and you are not subject to illusion, when that sentence is true or false. You would not know what 'that surface is red' means unless under those favourable conditions you could recognize a 'red' surface.

The sense or meaning of a word is a matter of how that word affects the meaning of any sentence that contains it. Thus the sense of 'square' is a matter of the difference it makes to the meaning of sentences such as 'this box is round' if you substitute 'square' for 'round'. The sense of 'if' is a matter of how the meanings of such sentences as 'if he is in London, he will not be at home for dinner' differ from the meanings of such sentences as 'he is in London, and so he will not be at home for dinner'. I shall say that a word 'P' mini-entails a word 'Q' iff any sentence '*p*' that contains 'P' mini-entails a sentence '*q*' that is the same as '*p*' except for 'Q' being substituted for 'P'. Thus 'square' mini-entails 'four-sided', because any sentence such as 'this area is square' mini-entails 'this area is four-sided'. The sense or meaning of a word may be called a 'concept'. While sentences are composed of words, the propositions that they express are composed of concepts. The sentence 'all humans are mortal' expresses a proposition that relates the concepts of being human and being mortal to each other; it claims that any instance of the concept of being human (that is, any human) is also an instance of the concept

of being mortal (that is, is mortal). To believe that a word or sentence has a certain meaning entails using it in certain ways; and the way you use it shows what you believe about its meaning.

I shall understand by a 'substance' a particular thing, capable of causing or being caused, such as Richard Swinburne, or a particular table, or a particular electron, or the planet Venus. I shall understand by a 'property' either a monadic property that is a characteristic (a feature) that can be possessed by one substance, such as being a person or a table or square or clever; or a relation that one substance can have to another substance (or substances), such as being-60-miles-away-from it. A property (as I shall understand the term) is a 'universal' or is defined in terms of universals; the same property can be possessed by many different substances (or multiples of substances). 'Square' and 'being-60-miles-away-from' are properties because many different substances can be square, and many different pairs of substances can be 60-miles-away-from each other. But being 'the oldest living human' is also a property, because, although it can be possessed by only one substance, it is defined in terms of features—'oldest' (that is, 'older than any other'), 'living', and 'human'—that can be possessed by many substances (or multiples thereof.) I shall understand by an 'event' a particular state of affairs or a change of state; more formally, an event consists in the possession of a certain property by a certain substance at a certain time (for example, my tie being red on 7 January 2014), or a certain substance having a certain relation to another substance (or other substances) at a certain time (for example, Oxford being-situated-at-a-distance-of-60-miles-from London now), or the coming into existence or ceasing to exist of a certain substance at a certain time. Two events are the same iff they consist in the occurrence of the same state (or change of state) of the world (for example, if they involve the same substances having the same properties at the same time), however that state is described.[3]

[3] More precisely, I shall assume that two events are the same iff their canonical descriptions (that is, ones that pick out the substances, properties, and times involved by informative designators) are logically equivalent; and that two substances, properties, or times are the same iff they can be referred to by logically equivalent 'informative designators'. This terminology is explained in Chapter 3. For fuller explanation of this terminology and justification for using these criteria for the identity of properties, see my *Mind, Brain, and Free Will* (Oxford University Press, 2013), 9–14.

What constitutes the truth conditions of a sentence that refers to a substance, property, or time depends on the criteria for something being that substance, property, or whatever. Two token sentences express the same proposition iff the two type sentences mean the same and the token sentences would be made true by the same state of affairs—that is, the same event. Thus 'Cicero was in Rome on the Ides of March AUC 693' expresses the same proposition as 'Tully was in Rome on 15 March 50 BCE', given that 'Cicero' and 'Tully' are names of the same person (with the same criteria for being that person), and 'the Ides of March AUC 693' and '15 March 50 BCE' are names of the same day (with the same criteria for being that day). Whereas, 'The most famous Roman orator was in Rome on 15 March 50 BCE' does not express the same proposition as those propositions; this is because, even though Cicero was in fact the most famous Roman orator and so the two token sentences would be made true by the same event, nevertheless the two type sentences do not mean the same as the former sentences. This is because the criteria for being Cicero are not the same as the criteria for being the most famous Roman orator; Cicero might not have been the most famous Roman orator but he could not fail to have been Cicero.

A given type declarative sentence normally expresses the same proposition, whoever utters it in whatever circumstances. 'The Battle of Hastings took place in 1066 CE' expresses the same proposition, whoever says it and whenever they say it. In this book I shall normally be concerned with sentences of this kind. But there are some type declarative sentences, tokens of which express different propositions, varying with who says them, when, and where. For example, 'I am ill' expresses a different proposition, varying with who says it, when, and where. If I say it now, it means that Richard Swinburne is now ill; if John said it yesterday, it meant that John was ill yesterday. And so on. Words that determine how the meaning of a sentence varies with who says it, when, and where, such as 'I', 'you', 'now', 'yesterday', or 'here' are often called 'indexicals'. I shall need on occasion to draw attention to sentences of this kind.

Almost all sentences that grammarians would classify as 'indicative sentences' are declarative sentences and so express propositions; but there are a few that are not. One kind of indicative sentence that does not express a proposition is a 'performative utterance'. If someone says 'I promise to pay you £10', she is not making a claim about what is the

case whether or not she had uttered that sentence; rather, she is bringing about an obligation that would not have existed without the sentence being uttered. If someone says 'I advise you to tell him what happens', she is not reporting the giving of advice, she is giving it. And so in neither case does the sentence express a proposition.

A proposition, unlike anything else expressed by a sentence, is true or false. Commands, questions, or performative utterances are not true or false. Many philosophers have argued that indicative sentences of various kinds that might seem to express propositions do not in fact do so but do other jobs instead. They have argued, for example, that 'moral judgements'—that is, sentences that say that actions are 'morally' 'good' or 'right' or 'ought to be done'—do not express propositions, but merely express approval or give advice. On this view, if someone says 'capital punishment is wrong', he is not making a claim about how things are, but merely expressing his disapproval of capital punishment or advising people to campaign for its abolition. Of course moral judgements may often do these latter jobs as well as the former job, but the philosophically interesting doctrine is the doctrine that they do not do the former job at all—that is, do not express a proposition, do not make a claim about how things are in the world. This account of moral judgements is much debated in philosophy, and in Chapter 11 I shall have occasion to reject it. In Chapter 6 I shall consider and reject the view of a few recent philosophers that creedal sentences do not express propositions.

How We Learn the Meanings of Words and Sentences

We acquire a belief about the sense of a word or the meaning of a sentence or sentence form by learning a few rules for their use of two kinds, which I shall call 'syntactic' and 'semantic' rules. The belief will be true (the word or whatever will have that meaning in the public language) iff it is a belief shared with most other users of the language. These rules consist of some of the criteria that determine the meaning of a word or sentence. We may learn such rules by being taught them explicitly or we may simply 'pick them up' by listening to conversations. I shall now explain the nature of such rules, primarily by showing how they work in respect of words, and thereby affect the meanings of sentences that

contain those words. I shall consider only the senses of those words (or longer expressions) that designate substances or properties, since these alone are relevant to the issues discussed in this book. Their senses are a matter of which are the substances or properties that they designate, and how they contribute thereby to the meanings of sentences that say something about those substances or properties. In this section and always thereafter, unless I specify otherwise, I assume that words are being used in their ordinary senses; I ignore the possibility of their being used in analogical or metaphorical senses, until I come to Chapter 4.

A syntactic rule for the use of such a word states some of the mini-entailments of the word. It will tell you to which other sentences of a given form or containing a given word some sentence commits you—for example, 'if you affirm that you "know that so-and-so", that commits you to "so-and-so is true"'; 'if you affirm "I know that John is in London", that commits you to "John is in London"'. The mini-entailments of a word include definitions—that is, words (or phrases) that have the same meaning—for example, 'a philatelist is someone who collects postage stamps or who knows about different kinds of postage stamps'. If you are taught the sense of a word by means of many different syntactic rules, some of those rules may prove inconsistent with others of those rules. For example, you may learn what it is for a substance to be a 'table wine' by learning the syntactic rules that being a 'table wine' mini-entails being 'a beverage', being 'fermented once', 'intoxicating', 'made from fruits', and 'made from either Pinot grapes or rice, and not made in New Zealand'. Clearly the last two conditions are inconsistent. In such a case it may seem to you that there is a sense of the word to which you can naturally extrapolate from almost all the rules, which leads you to discard one or two of them. 'Made from either Pinot grapes or rice, and not made in New Zealand' seems a condition whose disjuncts ('Pinot grapes' or 'rice') and conjuncts ('made from either Pinot grapes or rice', and 'not made in New Zealand') have no connection with each other, and so is not as simple as the 'made from fruits' rule. Hence a sense of 'table wine' that mini-entails the latter but not the former will seem a more natural sense of that word.

A semantic rule for words picking out substances or properties or sentences is one that points out or describes in other words (which already have a meaning in the language) paradigm examples of particular substances or kinds of substance or properties to which the word is

correctly applied, and perhaps also examples of substances or whatever to which the word is not correctly applied. The semantic rules for the use of a word 'P' tell you that being P just is being like the paradigm examples. A very simple semantic rule for the use of a name referring to a particular substance may point out the substance to which the name is correctly applied—for example, 'John is that boy'; a less simple one will describe the substance—for example, 'John is the boy who always arrives late at our class'. A semantic rule for the use of a word such as 'sweet' referring to a property of edible substances is one that identifies various paradigm substances as 'sweet' by getting you to taste them or listing substances, such as sugar, honey, treacle, or ripe peaches, which are sweet, where it is assumed or stated that a substance is 'sweet' iff it resembles these substances in the respect in which they resemble each other. A more informative rule contrasts such substances with various substances that are not 'sweet', such as vinegar or dark chocolate, where it is assumed or stated that a substance is 'sweet' iff it resembles the former substances in the respect in which they resemble each other, and does not resemble the latter objects in the same respect. An even more informative rule would indicate how similar to the paradigm examples a substance needs to be for the word to apply to it—for example, 'a substance is sweet iff it resembles paradigm sweet substances as much as they resemble each other'. But, analogously to the case of syntactic rules, it may follow from the belief about the sense of a word that you acquire partly by means of semantic rules, that one or two of the paradigm examples by which you learn that sense are not objects to which that word applies. You may have been taught the sense of 'cat' (in the non-technical sense of domestic cat) by examples, and then come to acquire a belief about what a 'cat' is that rules out one of the paradigm examples from being a 'cat', because it is not at all like the other examples. Maybe it was in reality a tiger cub.

Although we can learn how to use many words (and the resultant sentences) solely by acquiring some syntactic rules for their use, we can do so only if we already understand the words used in the syntactic rule. Unless the words to which a given word is related by a syntactic rule are themselves logically related to other words, and these are logically related to other words and so on, until we come to words that also have semantic rules for their use, we would not know what the former words meant. To understand the syntactic rule that 'the rate of inflation' mini-entails

(indeed is definitionally equivalent to) 'the average rate at which prices are increasing' you need to know what 'price' means. You could not have a belief about what a 'price' is unless you had a belief about what it is to 'buy' and 'sell'; and you could not have that belief unless you had a belief about what it is to 'exchange' objects (for money or another object); and you could not have the latter belief unless you had a belief about what it is to 'give' or 'take' objects; and you could not have that belief unless you had some semantic rule that would enable you to recognize someone 'giving' something to someone and to recognize someone 'taking' something from someone.

This process of proceeding from a few syntactic and semantic rules for the use of a word to a belief about its sense (and so to a belief about how it contributes to the meaning of sentences) is quite likely to produce the same belief about the sense of the word in two people who begin with the same set of rules, because, as a result of nature or nurture, all humans have similar cognitive mechanisms. But it is still possible that, while acquiring the same few syntactic and semantic rules for the use of a word, two people may come to have different beliefs about some other mini-entailments of that word or different beliefs about which other objects the word applies to, and so acquire different beliefs about the sense of the word, and so acquire different concepts. For example, two people may be taught what 'red' means by means of paradigm examples of 'red' things, all of which we would consider dark red, and as a result one may come to understand 'red' as applicable only to dark red objects, and the other may come to understand it as applicable to all objects that we would consider red. And this can happen even if both people are given a rule stating that to be 'red' an object must be as similar to the paradigm objects as they are to each other, because different people may count different objects as similar to the paradigm objects to the degree to which they are similar to each other.

But it also often happens that two people acquire the same beliefs about the senses of words by extrapolating from different sets of syntactic and semantic rules. They may extrapolate from different sets of syntactic rules, each of which is a subset of the set of all the mini-entailments of some word that has a public sense in the language. And clearly people often acquire the same beliefs about the senses of words from different paradigm examples of their application. Two people may acquire the same belief about the sense of 'red' from two different sets of paradigm

examples, one of which consists only of light red objects and the other of which consists only of dark red objects. Some people might be taught what a 'boat' is by a syntactic rule, that 'boats are vehicles for conveying people and goods across water'; while other people might be shown rowing boats, canoes, and dinghies, and told that these are boats, and that might (or might not) give them a narrower concept of 'boat' from that provided by the syntactic rule. How people extrapolate from some syntactic and semantic rules to a belief about the sense of a word and so to beliefs about other of its mini-entailments and other examples to which it would apply depends on what they regard as the most natural (that is, the simplest) account of that sense underlying the rules from which they have learnt to use it—a point to which I shall return later in this chapter. But because most of us have similar cognitive mechanisms and have acquired our linguistic beliefs from similar rules, we make similar judgements about the senses of words and the meanings of sentences that use them. Correction by authoritative persons (parents, teachers, and compilers of dictionaries) may greatly reduce any resultant differences, but it is inevitable that minor differences will remain.

Sometimes the learning process may lead groups of speakers to understand a word in two sharply different ways. In that case the word is ambiguous and has two distinct senses. Or sometimes the learning process may enable only some speakers to grasp the sense of a word, while others do not have the sensory or intellectual capacity to do this. Thus, suppose that many of us know nothing about wines. An expert then invites us to taste some wines, which, he tells us, are 'full-bodied', an expression that, let us suppose, has not been used before; and he invites us to taste other wines, which, he tells us, are not 'full-bodied'. If, as a result of this process, only some of us come to agree in our subsequent judgements about which wines are 'full-bodied', then 'full-bodied' has still been given a sense in the language, while those who cannot recognize 'full-bodiedness' will acknowledge that they have palates too poor to recognize full-bodiedness. Further, it may sometimes happen that, when the learning process leads some people to use a word in a way sharply different from others and to assert propositions that use it, those others insist that those propositions have no conceivable meaning. Disputes about which sentences entail which other sentences, which I will consider shortly, are consequences of different understandings of the senses of words. And in some of these cases it may be, as disputants claim, that

one or other understanding of a word has the consequence that sentences that use the word in one way entail contradictions, which would not result if it is used in the other way. But for the next two sections I shall ignore any differences in the way language users understand words, and assume that the learning process gives to all the members of a linguistic group the same public understanding of the senses of words and the meanings of sentences.

The Logical Status of Sentences

In learning the senses of words and so the conditions under which sentences of different forms containing different words are true, we learn which sentences mini-entail which other sentences, and under which circumstances different sentences are true and under which circumstances they are false. If a speaker is committed by '*p*' to '*q*', then the speaker is also committed to whatever '*q*' commits him, although he may not have in mind or even (because he has not fully understood '*q*') fully understood to what '*q*' does commit him. I shall understand by '*p* entails *q*' that '*q*' can be derived from '*p*' by a chain of mini-entailments: '*p*' mini-entails '*r*', '*r*' mini-entails '*s*', . . . and so on, until we come to a sentence that mini-entails '*q*'. So a speaker is committed—explicitly or implicitly—by a sentence to all its entailments. Hence, if a sentence is true, any sentence that it entails is also true; and if a sentence entails a false sentence, it itself must be false. The entailments of a sentence—unlike its mini-entailments—may not be obvious: and it may need a complicated argument to show that some sentence '*p*' entails a sentence '*q*'. It needs a complicated argument to show that the definitions of '1', '2', and the subsequent integers, together with the axioms of arithmetic, entail that $8^2 = 64$, or that there is no greatest prime number. This account of entailment has the consequence that one sentence may entail another, although the entailment may be of a kind not (yet) captured by any system of formal logic. Philosophical argument surely needs such an account, for so often it relies—and fairly obviously is right to rely—on purported entailments of sentences not yet so captured. 'This is red' surely entails, indeed mini-entails, 'this is coloured', and 'this is a human being' entails 'this is a person', although—as far as I know—there is no system of formal logic so far articulated that allows us to express those entailments.

As we reflect on the entailments between sentences, it becomes apparent that there are some sentences (and so the propositions that they express) that could not be true, whatever the world was like. We can see that some sentences are like this a priori, in the sense that we can see this merely because of our understanding of the criteria for the truth of a sentence of that form and for the kinds of object or property picked out by the words of the sentence; we do not need to do any further investigation (for example, scientific or historical investigation) to discover this. As explained in the Chapter 1, sentences that we can see straight off, or can work out by pure armchair reasoning on the sole basis of the rules for the use of words and sentences, could not be true, however the world differed from the actual world in any conceivable way, are 'inconceivable'—that is 'logically impossible'—sentences; and the propositions that they express are 'logically impossible' propositions. The most obvious examples of such sentences are explicit contradictions—for example, 'John is both over six feet tall, and not over six foot tall'. Then it follows that, for any sentence that entails a contradiction (not merely for any sentence that mini-entails a contradiction), there could be no state of affairs under which it is true. No sentence can be more obviously impossible in the strongest sense than a sentence that mini-entails a contradiction; and any sentence that entails a contradiction will be just as strongly impossible. And, just as we can see a priori straight off of some sentences that they are logically impossible, so we can see a priori straight off of other sentences that they are logically necessary; 'all squares have four sides' would be true, however different the world was from the actual world in any conceivable way. And any sentence whose negation entails a contradiction is just as strongly necessary as those sentences.

There are declarative sentences of kinds other than ones that we can immediately show to entail contradictions, for which it is equally obvious—in virtue of the rules for the use of the words which they contain—that, in whatever conceivable way the world was different from the actual world, they could not be true. I now suggest that all such sentences do in fact entail a contradiction.[4] Take, for example, 'there is a surface which is both red and green all over'. We can see that being 'green' is incompatible with being 'red', and so, if a surface is of

[4] For further argument in defence of this suggestion, see *Mind, Brain, and Free Will*, additional note C.

one colour, it cannot be of the other colour. Hence the cited proposition entails 'there is a surface which is such that it is red all over and not red all over'. And consider those propositions that used to be called 'category mistakes'—'The Prime Minister is a prime number' or 'I had two helpings of democracy for breakfast'. Being Prime Minister mini-entails being a person. Being a person mini-entails being a 'concrete' object (a particular constituent of the world.) Being a concrete object mini-entails not being an abstract object. Being a prime number mini-entails being an abstract object. So 'The Prime Minister is a prime number' entails 'there is something that is an abstract object and is not an abstract object'. A similar pattern of argument will show that 'I had two helpings of democracy for breakfast' entails a contradiction.

Any sentence that does not entail a logically impossible sentence, and so does not entail any contradiction, is a logically possible sentence and so expresses a logically possible proposition. Often it is very obvious that some sentence does not entail a logically impossible sentence: it makes sense to suppose, it is conceivable that, there could be a state of affairs in which it is true. A true sentence is logically possible. Often, too, it is very obvious that some sentence that is false entails no contradiction—for example, 'my desk is red'. And, more generally, it is often very obvious that some description of a world very different from our world entails no contradiction—for example, a world in which the law of gravity takes the form that any two bodies of mass m and m' at a distance r from each other attract each other with a force proportional to $mm'/r^{2.00000001}$ rather than, as is actually the case in our world, a force proportional to mm'/r^2. The postulated world would not be nearly as stable a world as our world, but there is evidently no inconceivability in supposing the existence of such a world.

Given that we can recognize as obvious the logical modality (possible, necessary, or whatever) of many sentences, a priori reflection can then lead us to discover the logical modality of other sentences when this was not initially obvious. The obvious direct way of discovering these things is by discovering entailments between sentences whose logical status is obvious. We can discover that a sentence is logically impossible by discovering that it entails a contradiction. For example, suppose some science fiction novel claims that 'John killed his grandmother Sheila before she was able to conceive a child'. This sentence entails 'John was the son of the son-or-daughter of Sheila, and Sheila did not have a son-or-daughter'.

That sentence entails 'Both {Sheila had a son-or-daughter} and {not-(Sheila had a son-or-daughter)}', which is a contradiction, and so logically impossible. The logical impossibility of the original sentence has been demonstrated by bringing to the surface a contradiction buried in it. In a similar way we can discover that a sentence is logically necessary by discovering that its negation entails a contradiction.

A logically necessary sentence is, of course, also logically possible. But how are we to show that some sentence that is not logically necessary is logically possible? We could not show this by showing of each sentence that it entails that it is not a contradiction, since any sentence entails an infinite number of other sentences, and we could not run through all of them to check that none of them is a contradiction. So what I shall call the 'direct' method of showing that a sentence is logically possible takes the form of showing that it is entailed by some other sentence that is obviously logically possible. This latter sentence is often a conjunction of sentences describing some obviously logically possible situation. For, clearly, any sentence entailed by a logically possible sentence is itself logically possible. Consider, for example, how one could show that it is logically possible that there be more than one space. A space is a collection of places at some distance in some direction from each other. There would be two spaces if there were two collections of places, members of each collection being at some distance in some direction from each other, but not at any distance in any direction from any member of the other collection. We can show that this is logically possible by describing in detail one way in which it would be like to live in a world in which there are two such collections of places, a description that is fairly obviously logically possible, and then pointing out that it entails that there are two spaces. C. S. Lewis's Narnia stories seem to depict such a world. In these stories people get from our environment to another environment, not by travelling for some distance in some direction, but by going into a wardrobe and shutting the door, or by taking a pill and then suddenly finding themselves in a different environment. Though Lewis does not make this point, people could discover that the two environments belong to different spaces by finding that one environment belongs to a closed unbounded space—that is, an environment in which by proceeding in any direction along any path (which does not cross itself) you eventually return to your starting point, and so you could explore the whole space—and by failing to find the other environment when you explore

the whole closed space. (The closed space would be a finite space. But it would not be finite in virtue of being bounded by some surface. Rather it would be the three-dimensional analogue of the surface of a sphere; in whichever direction you travel on the surface of a sphere, you eventually return to your starting point.) By reflecting on such stories we can come to see that what might have seemed at first not logically possible—that there could be more than one space—is in fact logically possible.

The methods of detecting the logical modality of some sentence, which I have just described, are what I called 'direct' methods. By a 'direct' method I understand a method that attempts to deduce the logical modality of a sentence from the logical modality of some other sentence or sentences. Use of a direct method requires prior agreement about the logical modality of those other sentences, and about which sentences mini-entail which other sentences. If an opponent agrees with the proponent of a proof in his assumptions about these matters, the proof will persuade. But, with more controversial cases, an opponent is likely to object to the proponent's assumptions; and then the proof, though it may be in fact sound (that is, have true premisses and entail the conclusion), will not be seen to be sound and so will not persuade.

Thus the proof of the logical possibility of there being more than one space depended on the assumption that it is logically possible that an explorer could discover that by proceeding in any direction from his starting point he eventually returns to his starting point. An objector might deny that this was logically possible, and claim that, while it might seem to an observer that he had always returned to his starting point, he must be subject to an illusion and in fact be returning to a place qualitatively but not numerically identical to his starting point. To rule this out, the proponent might fill out the example by postulating that the explorer left a signed document at his starting point, and always found the identical document whenever he arrived at what looked like his starting point, in whatever direction he went. Surely, he says, that is logically possible; and, if so, it would follow that it is logically possible that there could be an unbounded closed space, and so more than one space. Many opponents might then be convinced, but some might think that it is so obvious that it is not logically possible that an unbounded space could be closed that they would claim that any signed document that the explorer found whenever he arrived at what looked like his starting point must be a duplicate of the original document, caused to

occupy a place qualitatively identical to the starting point by some strange law of nature. From that it would follow that the space would consist of qualitatively identical kinds of place that were repeated at regular intervals as one went in any direction; on that supposition, the purported demonstration of the logical possibility of there being more than one space would fail. This example shows how purported demonstrations of logical status, and especially of logical possibility, by such 'direct' methods may sometimes fail to convince.[5]

Even if one purported demonstration of logical status fails to convince for this kind of reason, it may still be possible to reach agreement about a disputed conclusion by starting from different agreed premisses asserting that certain new sentences are 'obviously' logically (im)possible, and using in the argument only sentences about whose mini-entailments disputants are agreed. In their beliefs about the logical modality of sentences, as in almost all matters, humans are fallible; our conclusions may be very probable, but they are not certain. For two millennia it seemed obvious a priori that 'there is a point through which two or more different straight lines in a plane can be drawn that will never meet a given straight line in the same plane, however far the lines are extended' could not be true under any circumstances. But in the nineteenth century people began to recognize that there are circumstances in which this sentence would be true (from which, incidentally, it follows that there could be a 'closed space' of the kind described in the previous paragraph—for different reasons from those outlined above). Nevertheless, in all matters the way things seem to be makes it probable (in the absence of counter-evidence) that that is the way they are—a principle sometimes called 'the principle of credulity'. The very fact that it seemed that there could be no circumstances in which such a sentence could be true made it probable that there are no such circumstances, and so that 'L and L* are straight lines through P in a plane, which—however far extended—will never meet straight line L** in the same plane' entails 'L and L* are the same line'. Yet in supposing this humans were mistaken.

[5] The example of the experiences that an explorer would have in exploring what seemed to be an unbounded closed space and the different ways in which they could be interpreted is taken from Hans Reichenbach, *The Philosophy of Space and Time* (Dover Publications, 1958), section 12.

The Principle of Credulity

Since I shall need to use this all-important epistemic principle at a few other places in this book, it will—I hope—be useful to make a short digression from the main line of argument, to expound the principle more fully and to justify it. The principle claims that any basic belief (that is, any belief that seems true, but not because it is inferred from any other belief) is as such probably true merely on the believer's evidence that on balance it seems (or appears) true,[6] so long as the believer does not have any counter-evidence; and hence—in the absence of such counter-evidence—we are justified in believing any basic proposition that we find ourselves believing. This holds paradigmatically for perceptual beliefs—that is, beliefs arising from perception. If my evidence is that it seems that I am seeing a desk in front of me, then, in the absence of counter-evidence, probably there is a desk in front of me. Of course, in the case of most perceptions, I will have sensations (for example, patterns of colour in my visual field) that I believe to be caused by the object apparently perceived (for example, the desk). But that I am perceiving that object is not a conscious inference from those sensations; it is a datum that comes with the sensations, providing their interpretation. The principle applies not merely to perceptual 'seemings' but to 'seemings' of all other different kinds. If my evidence is that it seems that I have six spots in my visual field, or that I 'remember' seeing the Queen in London last week, or that the man in the corner was whispering to his friend 'I am a Russian spy', or that 'all humans are mortal and Socrates is a human' entails 'Socrates is mortal', then probably on the evidence available to me (and in the absence of counter-evidence) these things are so. The principle also applies to any very general beliefs that we hold about geography and history that, we believe, are taken for granted in our culture, such as that the earth is round and existed long before we were born. And the more obvious it seems that some such thing is so, then on that evidence (and in the absence of counter-evidence) the more probable it is that it is so, and the better justified the believer is in believing it.

[6] The point of this clumsy phrase is that the evidence is that the proposition on balance 'seems true'. If I have that evidence, then that evidence makes the belief probably true. But, while someone else may have the evidence that the proposition seems to me to be true, that evidence is not the same evidence as evidence that the proposition 'seems true', and will not normally be enough to make it probable that the proposition is true.

Counter-evidence, or 'defeaters', as such evidence is often called, are basic beliefs or beliefs made probable by basic beliefs, of two kinds: overriding defeaters and undermining defeaters. If the defeater is a belief stronger than my original basic belief, then the latter will no longer be justified. An overriding defeater is positive evidence that my belief is false. If I believe (because I seem to remember it) that I saw the Queen in London last week, and I then read in the newspaper that she is in Australia for a whole month, that new evidence would outweigh my apparent memory (unless the latter was very strong), and so make it probable on balance that my original belief was false. Similarly, if it seems to me that there cannot be more than one space, and then I read the Narnia stories and believe, when I reflect on them, that they seem obviously logically possible, that 'seeming' makes it probable that they are logically possible and so that there can be more than one space. An undermining defeater is any evidence that I have not acquired my original belief by a reliable route. If I learn that I have just woken up from being unconscious for several days, and so my memories of exactly when events occurred will probably be confused, that does not make it improbable that I saw the Queen in London last week, but it does show that my memory belief that I saw her is not good grounds for supposing that I did. And, if you show me that I cannot normally hear what people are saying when they are as far away as the man in the corner even when they are not whispering, that does not show that the man in the corner did not say 'I am a Russian spy', but it shows that I have very little reason for supposing that he did.

But what the principle of credulity claims is that, in the absence of defeaters, any basic belief is as such probably true merely because it seems true. If we could not trust our basic beliefs in the absence of positive evidence for their truth, that positive evidence would have to consist of other basic beliefs. And, if we insist that we must not trust any belief that is not confirmed by other beliefs, we would still need subsequently to trust our memory belief (itself a basic belief) that the latter beliefs confirmed the former belief. Without the principle of credulity, we could not have any justification for believing almost anything that we believe. So I use it at this stage to point out that, if it seems (that is, we find ourselves believing) that some belief about the logical modality of some sentence or about some sentence entailing another sentence is true, then, on the evidence of it so seeming, it is probable that that belief is

true—unless we have some reason to suppose otherwise.[7] What is apparently conceivable is probably conceivable; and what is apparently inconceivable is probably inconceivable.

Reflective Equilibrium

I now return to the main topic of this chapter, which concerns how to show that some sentence has a certain logical modality. I shall be using the direct methods that I have been analysing at various places in Part II. I shall attempt to show the logical possibility of there being a person with certain properties—for example, being non-embodied—by describing in detail a situation that, I shall suggest, is 'obviously' logically possible and entails the existence of a non-embodied person. And I shall attempt to show that it is logically impossible that a person should have certain properties—for example, being essentially omnipotent and perfectly free and also omniscient (in a strong sense of the latter) by showing that it entails a contradiction.

While these 'direct' methods will enable all investigators who make the same judgements about what is apparently conceivable and apparently inconceivable to determine the logical modality of many sentences (and so of the propositions that they express), there will clearly be many sentences whose modality investigators cannot determine straight off—ones such that they cannot immediately find an obviously conceivable sentence that entails it, or a route of proof by which they can deduce from it a contradiction. In that case there is what I will call a 'semi-direct' method that may help investigators to discover the logical modality (defined in the senses already explained). A 'semi-direct' method is one that draws out the criteria for the use of a sentence by a more roundabout a priori method. The obvious such method is the method that (in the context of discovering moral truths) Rawls called 'reflective equilibrium'.[8] This relies on the understanding that what we derive from the learning process is often (via a limited understanding of the senses of its

[7] For a detailed discussion of the nature and justification of the Principle of Credulity (often called 'phenomenal conservatism'), see my 'Phenomenal Conservatism and Religious Belief', in M. Benton, J. Hawthorne, and D. Rabinowitz (eds), *Knowledge, Belief, and God: New Insights* (forthcoming).

[8] See John Rawls, *A Theory of Justice* (rev. edn, Oxford University Press, 1999), 18.

component words) only a limited understanding of the meaning of a type of sentence; we may not initially acquire a total grasp of what are the circumstances in which a sentence of that type would be true and what are the circumstances in which it would be false. We may, for example, derive from the learning process (as well as some understanding of the syntactic rules) an understanding of what are some paradigm examples of circumstances in which a sentence of that type would be true (and some in which it would be false), and so we will realize how to use that type of sentence in circumstances very similar to these; but that may leave us uncertain about which are the circumstances somewhat different from those of the paradigm examples in which it would be true and which are the ones in which it would be false. The method of 'reflective equilibrium' is a method of discovering the criteria for the wider application of a type of sentence, by reflecting on more and more paradigm examples of its correct application. The method assumes that the simplest account of the use of sentences of that type in various narrowly described sets of circumstances is the account that most probably describes how such sentences would be used under all circumstances, and so most probably describes an aspect of the meaning of those sentences, which determines their logical modality. Such an account is simple in so far as it uses few predicates designating properties easily recognizable in many different kinds of paradigm example—a condition that I will illustrate with examples.

The application of this method to discover a general syntactic rule determining the logically necessary and/or sufficient conditions for the truth of a sentence of some type has been a prominent feature of 'analytic philosophy'. Consider the procedures whereby philosophers have tried to set out the logically necessary and sufficient conditions of 'S remembers having done *X*'. A first suggestion by Hume was (in effect) that this was equivalent to 'S has a "lively" mental image of having done *X* which "preserves the original form" of S's awareness of having done *X*'.[9] This account would have the consequence that 'S remembered having done *X*' entails 'S had a mental image of having done *X*'. But then, it was objected, innumerable examples of usage showed that we allow that someone might have 'remembered' having done some action, even if he did not

[9] See David Hume, *A Treatise of Human Nature*, 1.1.3.

have a mental image of having done it. So it was suggested that almost all examples of usage showed that, in order to 'remember' having done *X*, someone needs merely a true belief that he had done *X*. But then critics pointed out that we would not count someone as having 'remembered' having done *X* merely because he had acquired the belief that he had done *X* from having read in a book that he had done *X*. So then it was suggested that, for S to 'remember' having done *X*, his belief that he had done *X* must have been caused by him having done *X*. Then it was pointed out that, even if S having done *X* caused someone else to write in a book that S had done *X* or even if having done *X* caused S himself to write in his diary or a letter of which he kept a copy that he had done *X*, and his reading this in the book or diary or letter caused him to believe that he had done *X*, we still 'would not say' that he 'remembered' having done *X*. Only if the route of causation went directly through S's body (in effect, his brain), and only if the resulting belief was a basic belief, would the resulting belief count as a memory. And so an account of personal memory began to emerge along the lines of 'S remembers having done *X* iff S has a true basic belief that he did *X*, caused by a chain of causes in S's body, itself initiated by S having done *X*'.[10] This account was supposed to be logically necessary, and could be used to show sentences about personal memory to have particular logical modalities—for example, that, 'if S remembers having done *X*, then S has a true belief that he did *X*' is logically necessary. Similar processes led analytic philosophers to produce plausible accounts of the logically necessary and/or sufficient conditions of 'S knows that *p*', 'S perceived *O*', and such like.

In each case a simple extrapolation from a few examples was seen as giving a probably correct account of some logically necessary or sufficient condition for the truth of some type of sentence, until investigators came across cases where a sentence of that type was clearly not being used in a way that satisfied that condition, and so they sought a different account. In seeking such an account, no one suggested that the only exceptions to a previous account were the exact narrowly described examples that did not satisfy the account. No one suggested that the

[10] This is a rough summary of the analysis of 'S remembers having done X' reached by C. B. Martin and M. Deutscher, 'Remembering', *Philosophical Review*, 75 (1966), 161–96. I do not myself endorse this analysis, and shall not assume it to be true, when discussing 'memory' in Chapter 7.

only exception to the principle that, for S to remember having done *X*, his belief that he had done *X* must have been caused by having done *X* 'unless the causal route proceeded through a book written by someone else or through S's diary or a letter written by S'. Why no one suggested that was because it would have been far too ad hoc in mentioning three narrow kinds of exception (a book written by someone else, and a diary or letter written by the subject) rather than mentioning one general kind of exception ('caused by a chain of causes in S's body'). The fewness of the predicates in a suggested account of the logically necessary or sufficient conditions for the truth of some type of sentence is important evidence of the correctness of that account.

The simplicity of a general principle underlying the application of a word may be a matter, not of the fewness of the predicates involved but of the 'easily recognizable' character of the properties designated by predicates in a syntactic rule or of the similarity to each other of the paradigm examples in a semantic rule. Suppose that the only red objects language users have seen are ripe strawberries, ripe plums, London buses, rubies, holly berries, and pink roses; and they are taught that these are paradigm examples of 'red' objects. Then, given that they can easily recognize the similarities of colour to each other of these different paradigm examples, they would see (as the simplest account of its meaning) the logically necessary general principle governing the use of 'red' as 'an object is red iff it is similar in colour to actual ripe strawberries, ripe plums, London buses, rubies, holly berries, and pink roses in the respect in which they resemble each other'. This in turn will lead them to conclude, when they come to observe what we would call different shades of red and name them 'scarlet' or 'crimson', that such sentences as 'if it is scarlet, it is red' are logically necessary, and so express a logically necessary proposition.

The third aspect of my definition of the simplicity of an account of the conditions for the correct use of a word or sentence form is that the suggested syntactic or semantic rules fit many different kinds of paradigm example. If language users were given only two kinds of paradigm example of red objects—for example, rubies and ripe plums—although their similarity to each other might be easily recognizable, it would not be obvious whether only (what we call) dark red objects count as 'red' or whether all of (what we call) red objects count as 'red'. Neither extrapolation from the paradigm examples would be especially simple. Likewise,

if we had only a few paradigm examples of 'S remembers having done *X*' or 'S knows that *p*', there would be many different but not especially simple ways of extrapolating from the examples to a general logically necessary principle about memory or knowledge. The evident simplicity of one account becomes apparent only when it explains how a word is used in many different kinds of paradigm example.

An account of the logically necessary or sufficient conditions for the correct use of a word or sentence form, which captures almost all our usage but would need to become very much more complicated in order to capture one particular usage of that word or sentence form, would still be recognized as the correct account of the normal meaning of the word or sentence form, and the odd usage would then be considered one that uses the word or sentence form in a different sense from the normal sense. Thus someone may sometimes be said to 'remember' or 'know' something that did not happen, just because he claims to remember or know it in the normal sense; and then he is said to be using these words in an 'inverted comma sense'.

So far I have been assuming that all speakers of a language would regard the same examples of words and sentences as paradigm examples of their correct application—that is, ones such that it would be inconceivable to suppose that they did not apply to almost all those examples. But, as discussed earlier, most speakers will have been taught the meanings of words and sentences from different paradigm examples, and sometimes from very different kinds of examples. That may or may not lead them to acquire common concepts, expressed by inter-translatable words, depending on whether the concept that some speakers derive from one set of paradigm examples is one that they recognize as applying to the examples from which other speakers have derived their concept; which is to say, whether reflective equilibrium leads to agreement about the different examples.

Suppose that there are two communities isolated from each other. One community lives in an environment where every object is of a different shade or mixture of blue or green: light blue, dark blue, blue-green, light green, dark green, and so on. The community recognizes that there is something common to those different shades and they call it being 'colorato'. The other community lives in an environment where every object is of a different shade or mixture of red or green: light red, dark red, red-green, light green, dark green, and so on. They too recognize

that there is something in common to those different shades, and they call it 'coloré'. Suppose now that the two communities become acquainted with each other and their environments. Then it may happen that each community would come to recognize that what their objects of different shades have in common is the same kind of thing as what the objects of different shades of the other community have in common, which kind of thing we call being 'coloured'. So the community would be recognizing that their understanding of their general term ('coloré' or 'colorato') is that it applies not merely to objects of shades in the environment of the other community already known to them, but also to ones not previously known to them. If that is what happens, the community would be showing that there was implicit in their previous understanding of 'coloré' or 'colorato' a natural fit to wider examples. If the first community came to recognize this, it would come to recognize that the sentence 'if it is light red [or whatever they came to call that colour], it is colorato' is logically necessary and so expresses a logically necessary proposition; and, if the second community came to recognize this, it would come to recognize that 'if it is dark blue, it is coloré' expressed a logically necessary proposition. It would have turned out that 'colorato' and 'coloré' mean the same. Yet the processes by which the two communities originally learnt the concepts of 'colorato' and 'coloré' would not have included teaching them this.

On the other hand, it might happen that one or both communities did not come to apply their words 'coloré' or 'colorato' to the new shades. This would show that their previous understanding of those words involved a much narrower understanding of them than as 'coloured' (in our sense). In that case they would have to claim that sentences such as 'if it is light red, it is colorato' express, not logically necessary but logically impossible propositions. Which outcome would result would depend on the kinds of sensitivity to colour that the teaching process had given them. Clearly, the greater the overlap between the paradigm examples of 'colorato' and 'coloré' objects, the more likely it is that each group would come to see these words as meaning the same.

Whether a sentence expresses a logically necessary, possible, or impossible proposition depends on the senses of the words that it contains. What the various colour and other examples that I been discussing illustrate is that, whether different language users learn what that sense is from the same or different paradigm examples of its correct

application, they may derive different understandings of that sense and so different concepts, according to the kind of similarities between the paradigm examples that they are able to recognize. In the example of people being exposed to paradigm examples of 'red' objects of six different kinds—ripe strawberries, ripe plums, London buses, rubies, holly berries, and pink roses—I assumed that language users could recognize that they were all similar to each other, and so shared a common property that they would call 'red'. But, if another group of language users could not recognize any similarities of colour between the paradigm objects, they would conclude that there are six different unconnected senses of 'red'. From that it would follow that, since none of these paradigm objects are scarlet, the sentence 'if it is scarlet, it is red', instead of being logically necessary, would be logically impossible, and so express a different proposition from the one expressed by the previous group of language users. And we have seen in the 'colorato' example, where people learn the senses of colour words from different kinds of paradigm examples, that it may be the kinds of similarities that language users are able to recognize that determine whether the propositions expressed by sentences are logically necessary, possible, or impossible. And this is a feature not merely of sentences including words designating colours or tastes, but of all sentences using words whose sense is learnt in part from paradigm examples. There will be a common understanding of the meaning of some doctrine and so of its logical status in so far as most speakers find the same sentences conceivable and the same sentences inconceivable; and that depends on whether they can recognize the same similarities between paradigm examples of the correct application of words and sentences. I shall in future continue again to assume that all language users recognize the same similarities, and so understand words and sentences in the same sense—unless I state otherwise. The method of reflective equilibrium can help to bring to light what that common understanding is. Like any conclusion reached by any direct method, any such conclusion is only a probable one, which we might have to retract when unforeseen kinds of example come to our attention. I shall be using the method of reflective equilibrium in Chapter 11 to show how we can discover new moral truths.

In order to discover the senses of any words including colour predicates that have semantic rules for their application, and so the concepts that they express, communities will need in practice to have observed

actual examples of differently coloured (or whatever) objects. But the conclusion that they reach by reflecting on the concepts that they acquire is a conclusion that is logically independent of whether there are any objects that have these colours (or whatever), let alone whether they know this; and so, like the conclusion about the nature of remembering, it is an a priori conclusion.[11]

Two Mistaken Modern Doctrines about Logical Status

Some modern philosophers have advocated doctrines that have had in their time very considerable philosophical influence, and that at first sight seem to provide quick semi-direct methods for settling issues of logical status. I shall express these doctrines as doctrines about the status of sentences; sometimes their advocates express them in terms of the status of 'propositions' or 'statements', but nothing in my discussion turns on these distinctions.

One of these doctrines, due to Hume, is what I may call 'concept empiricism'. Hume's very general principle of the bounds of intelligibility is that all our 'ideas' are compounded of simple ideas, and that all simple ideas are derived from 'impressions'. By 'impressions' he means 'all our more lively perceptions [that is, conscious events] when we hear, or see, or feel, or love, or hate, or desire, or will'; while by 'ideas' he means 'the less lively perceptions, of which we are conscious, when we reflect on any of those sensations or perceptions above mentioned'.[12] Our 'impressions' consist of simple impressions that give rise to simple 'ideas'. We can combine our simple ideas in various ways so as to form complex ideas of things of which we may not have had any impression. Thus, to use Hume's example, having had impressions of gold and of a mountain, we can have ideas of gold and of a mountain and then combine them to form the idea of a gold mountain, of which we have not had any

[11] 'It is no objection to the claim of a priori justificatory status for a particular belief that experience is required for the acquisition of some of the constituent concepts' (L. Bonjour, article on 'A Priori', in R. Audi (ed.), *The Cambridge Dictionary of Philosophy* (2nd edn, Cambridge University Press, 1999).

[12] David Hume, *An Enquiry Concerning Human Understanding*, ed. L. A. Selby-Bigge (2nd edn, 1902), sect. 2, p. 18. All subsequent references to pages of the *Enquiry* are to the pages of this edition.

impression. But—Hume claims—none of us can have any ideas (that is, any conceivable ideas) except ones composed of simple ideas ultimately derived from our own impressions. And since, he assumes, humans have impressions only of certain sensible kinds, we can have ideas only of those kinds. So, he wrote, 'When we entertain, therefore, any suspicion that a philosophical term is employed without any meaning or idea (as is but too frequent), we need but enquire *from what impression is that supposed idea derived*? And if it be impossible to assign any, this will serve to confirm our suspicion.'

Hume's principle, put in more contemporary terms, is that a sentence is logically possible only if the words designating properties that it contains are all ones of which we have observed instances, or are defined in terms of such words; and so that propositions are logically possible only if the concepts that they contain are ones of which we have observed (or, more generally, experienced) instances, or are defined by such concepts. As we have already seen, in order to grasp some concept, we need to acquire (as well as syntactic rules) semantic rules for its application, or for the application of concepts by which the former concept is defined. And, although it is logically possible that we could have been born knowing such rules, in practice in order to have such rules we need to have observed paradigm examples of their correct application. Hence, contingently, Hume's principle is surely correct, and few philosophers would disagree with it. The medievals had a slogan, *nil in intellectu, quod non prius in sensu* ('nothing is in the mind, unless previously it was an object of sense'). And Aquinas held that the senses of predicates applied to God 'are known to us solely to the extent that they are said of creatures'.[13]

But, unlike Aquinas and others, Hume thought that this principle could resolve disputes about which (conceivable) ideas we could have, and so which propositions are logically possible. Hence his conclusion that what we can think 'is confined within very narrow limits'. But this principle cannot resolve such disputes. because it is only a principle stating a necessary condition for a sentence being logically possible; it certainly does not state a sufficient condition for this. This is because—to

[13] St Thomas Aquinas, *Summa contra Gentiles*, I.33.6. All my citations of translations of *Summa contra Gentiles* are taken from the translation by Anton C. Pegis under the title *On the Truth of the Catholic Faith* (Image Books, 1955).

repeat a point made earlier in this chapter—different people may extrapolate from the very same observations to derive different concepts, expressed by words with very different senses; and whether a word defined in terms of words of which we have observed instances can be combined with other words so as to occur in a logically possible sentence depends on what all those words mean. (To phrase the point in Hume's terms, the same 'impressions' can give rise to many different simple 'ideas', and some of these ideas can be combined with others to yield conceivable complex ideas and some cannot.).

Suppose Hume has observed (had 'impressions' of) what are in fact eighteenth-century European humans. These observations could give rise to—that is, cause—in some people a concept (an 'idea') designated by a word applicable to and only to eighteenth-century European humans. But they could also give rise to a concept applicable to and only to embodied humans of any time and culture; or to a concept applicable to and only to embodied rational beings (including, for example, inhabitants of a distant planet), or to a concept and so a word applicable to and only to any rational beings at all (for example, also to ghosts or angels, if there could be such). Let us call these concepts four different concepts of a person, designated by a word 'person' with four different senses. Then whether some sentence using the word 'person' is logically possible will often depend on which of these concepts it is expressing by 'person'.

Let us suppose that we have also derived from observations the concept of 'any', the concept of 'a part', the concept of 'not' having something, and the concept of 'a body'.[14] Now is it logically possible that there is a person who does not have any body as a part (that is, is not embodied)? No, given the first three concepts of person. Whether this is possible on the fourth concept of person depends on whether this concept of person can be combined with the concepts of 'any', 'not', 'part', and 'body' in the way suggested. And what applies to this example applies to innumerable similar examples that could be constructed. Everything depends on which combinations of concepts extrapolated

[14] Hume seems to allow that we do have in some sense a concept of 'not' that he calls 'contrariety' and lists as a 'connection among ideas' *(Enquiry*, p. 24 n. 4); and that general ideas, and so the concept of 'any', are really particular ideas that call to mind other particular ideas (*Enquiry*, p. 158 n., summarizing his *Treatise of Human Nature*, 1.1.7).

from observations concepts are themselves conceivable (that is, ones such that sentences asserting that there are instances of them are logically possible), and which are not. But concept empiricism cannot answer the questions of which combinations of concepts are conceivable and which are not. Even if my fourth concept of a 'person' can be combined in the suggested way to produce a conceivable concept of a bodiless person (as I shall argue in Chapter 7 that it can), that does not determine whether it can be combined with the concepts of—for example—having free will and causing the existence of the universe, so as to yield a logically possible concept. To resolve these issues, we would still need to proceed by the direct or semi-direct methods that I have described, or by some other method. I conclude that there is no good prospect that concept empiricism will enable us to determine the logical status of sentences.

The other modern doctrine that sought to provide a quick solution to questions of which sentences are logically possible (or whatever)—one powerfully influential in the middle years of the twentieth century—was verificationism.[15] According to the verificationist theory of meaning, a sentence is 'factually meaningful', in my terminology 'logically contingent', iff it can be 'verified'.

One way of understanding the doctrine is to suppose it to be claiming that to be 'factually meaningful'—that is, logically contingent—a sentence must be *conclusively* verifiable by an observation-sentence—that is, a sentence that reports an observation that 'in principle' someone could make. But innumerable obviously logically contingent sentences are not 'conclusively' verifiable. 'All ravens are black' (that is, were, are, or will be black) cannot be conclusively verified, for, however many ravens you observe to be black, it is always logically possible that one day a white one will be observed. Another way of understanding the doctrine is as claiming that to be 'factually meaningful' a sentence must be 'either conclusively verifiable or conclusively falsifiable' by an observation-sentence. 'All ravens are black' could be conclusively falsified by observing a white raven. But again there are obvious logically contingent sentences that cannot be conclusively verified or falsified, such as 'All humans are mortal'—that is, 'all humans die at some time or other'. You

[15] This doctrine originated in the work of the 'Vienna Circle' in the early 1930s, and was popularized by A. J. Ayer in his influential book *Language, Truth, and Logic* (Victor Gollancz Ltd, 1936).

cannot conclusively verify this sentence because, however many humans you observe who prove to be mortal, maybe one day a human will be found who goes on living for as long as observations are made. But also you cannot conclusively falsify this sentence, because, however long some human lives, one day he may be found dead.

Faced with these difficulties, verificationists suggested weaker verification principles. The weakest such principle holds that a sentence is 'factually meaningful' iff it can be confirmed or disconfirmed by an observation-sentence. By 'confirm' I mean 'raise the (epistemic) probability of'—that is, 'count as evidence in favour of'; by 'disconfirm' I mean 'lower the (epistemic) probability of' or 'count as evidence against'.[16] Thus, although you cannot conclusively verify 'all ravens are black', you can make observations that would count as evidence in favour of this sentence. Observing many ravens in different parts of the world and finding them all to be black would count as good evidence favouring 'all ravens are black'. And, even though you cannot conclusively verify or conclusively falsify 'all humans are mortal', you can have good evidence in favour of it—for example, that all of many reliable reports given to you (and so constituting your 'observation-sentences') about the lives of many humans state that all of them have died within at least 200 years.

Although there are no very obvious counter-examples to the weakest verification principle, there do seem to be sentences that seem to most

[16] The 'epistemic' probability of a proposition is relative to a certain collection of evidence. The epistemic probability of a proposition (e.g. some scientific theory) is a measure of how probable certain evidence makes that proposition. The evidence normally taken into account is 'the total available evidence'. This is different from 'statistical probability', which is a measure of the proportion of events of one kind in a collection of events of another kind (e.g. the proportion of heads in a sequence of tosses of a certain coin). These kinds of probability are both different from 'natural' (or 'physical') probability. The 'natural probability' of some event is a measure of the extent to which that event is predetermined by its causes. If, for example, the natural probability of a particular toss of a particular coin being heads was 2/3, then the coin would have a bias of 2/3 in favour of landing heads. If the natural probability of an event is 1, its occurrence is made inevitable by its causes; and the event is said to be 'naturally necessary'. For a fuller exposition of these distinctions, see my *Epistemic Justification* (Oxford University Press, 2001), ch. 3. In that book I make a distinction between what I call 'logical' probability and what I call 'epistemic' probability; and I call the correct criteria of inductive inference criteria of 'logical' probability. That distinction is not important for the issues discussed in the present book, and what I write in *Epistemic Justification* about 'logical' probability can be in general be read as concerned with 'epistemic' probability in the sense with which I am concerned in the present book.

people both to be logically contingent and to be neither confirmable nor disconfirmable. For example:

> There is a being like humans in his behaviour, physiology, and history who nevertheless has no thoughts, feelings, or sensations.

or

> Some of the toys that to all appearances stay in the toy cupboard while any humans in the house are asleep come out of their boxes and dance in the middle of the night without disturbing any detecting devices, and then go back to the cupboard, leaving no traces of their activity.

Such sentences are apparently not confirmable or disconfirmable—to all appearances there is no possible evidence of observation that would count for or against them. If, for example, it is known that something looks like a human, has the body of a human, reacts like a human, talks like a human, and has been born and has grown up like a human, there is no further observational test that could be done to show whether or not he really feels anything when you stick a pin into him and he screams. So the claim that (somewhere in the universe) there exists a being of the kind described in the first indented sentence cannot be confirmed or disconfirmed by any observation-sentence. And yet it does rather look as if these sentences make factual claims. Further, all the variants of a verificationist principle seem to beg the crucial question of what it is for it to be 'in principle' possible for some observation to be made. For it seems to mean that it is logically possible for the observation to be made. Since presumably whether or not an observation is made is not logically necessary, it follows that on all variants of the principle a sentence is a logically contingent sentence in virtue of its relation to logically contingent observation-sentences, and so explicate 'logically contingent' by 'logically contingent'.

And, finally, even if these difficulties could be overcome, there seems no general reason for believing the weakest verificationist principle to be true. As I argued earlier, in order to understand the words of a sentence, we need to be able to recognize instances where they would be correctly applied or where words definitionally related to them would be correctly applied. And, in order to understand the significance of the pattern in which the words are combined (for example, a subject–predicate sentence), we need to be able to recognize circumstances where examples of such a sentence-pattern would be true or false. But

none of this shows that, in order to understand a particular sentence (and so the proposition expressed by it), we have to be able to recognize circumstances in which *it* would be true or false, or even to be able to recognize observations that would be evidence for or against *it*. I conclude that, as with concept empiricism, so also with verificationism, there is no good prospect that this doctrine will enable us to determine the logical status of sentences.

Inductive Methods of Discovering Logical Modalities

All the ways, direct or semi-direct, of discovering the logical modalities of sentences considered so far are a priori ways, ways in which mere reflection on the criteria for the correct use of words, sentences, and sentence forms can show us whether (probably) a sentence is logically necessary or whatever. But when we cannot reach an agreed conclusion about the logical modality of some sentence by means of an a priori argument of the kinds discussed, it may be possible to show by an a posteriori argument, an inductive (that is, probabilistic) argument from logically contingent premisses, that that sentence is probably logically necessary or possible (or whatever). The logical modality remains something discoverable by a priori reasoning, but not necessarily by us, but only by a being of superior powers to ours, able to survey all the infinite number of entailments of a sentence and to conceive of all the circumstances where a concept would or would not apply. One kind of inductive argument in favour of some sentence having a certain logical modality is an argument from testimony. For example, the theorems of arithmetic (being entailed by the axioms of arithmetic, which we assume to be logically necessary) are logically necessary. But we may be unable to prove of some purported theorem (a 'mathematical conjecture') either that it is indeed entailed by the axioms and so a theorem, or that its negation is so entailed; and so we may be unable to show that it is logically necessary or that it is logically impossible. But, then, suppose that we discover that some brilliant mathematician claimed to have deduced it from the axioms. This logically contingent fact certainly increases the probability that the theorem is logically necessary. Famously, Fermat wrote that he had a proof of a theorem that came to be known as 'Fermat's last theorem', but he died without publishing the

proof; the theorem was not proved until very recently, and it is doubtful whether Fermat had the mathematical tools that would have enabled him to prove the theorem. Still, that remark of Fermat constituted some evidence that the purported theorem was indeed a theorem and so necessary. If there were a theorem that many mathematicians claimed to have proved, that would be significant evidence for its truth. So maybe there are sentences whose logical modality could be proved by a priori methods only by a being of far superior powers to ours, able to survey all the infinite number of entailments of a sentence and to conceive of all the circumstances where a concept would or would not apply. If there were evidence that such a being had revealed what that logical modality is, that would be contingent evidence that made probable the purportedly revealed claim.

Much more relevant to the main concern of this book are inductive arguments of a different kind. Scientists have criteria for when observed data (the evidence) make some explanatory theory probable. Philosophers of science give somewhat different accounts of what these criteria are, but I suggest that something along the following lines must be roughly correct.[17] An explanatory theory T is rendered (epistemically) probably true by evidence (data) in so far as (1) if the theory is true, it is probable that that evidence would occur, (2) if the theory is false, it is improbable that that evidence would occur, (3) the theory 'fits in' with any 'background evidence' (that is, it meshes with theories outside the field it purports to explain, which are themselves rendered probable by their evidence in virtue of these criteria), and (4) the theory is simple (in the number of substances and properties, and number of kinds of substances and properties, and the kinds of interactions between them that it postulates). Now, of course, a logically impossible theory cannot be true, however well it seems to satisfy such criteria. But suppose that we cannot show by arguments of the kind considered so far whether some theory T is logically possible or logically impossible. Suppose also that our evidence is such that by these criteria it would make it somewhat more probable than not that T is true, if T were logically possible. I suggest that in that case the evidence makes it on balance probable (that is, more probable than not) that T is true and so logically possible.

[17] For a fuller exposition of this account of the criteria for evidence making a theory probable, see my *The Existence of God*, ch. 3; and also my *Epistemic Justification*, ch. 4.

And I suggest, more generally, the greater the probability that our evidence would give to T if T were logically possible, the greater the probability (though smaller than the former probability) that T is true and so logically possible. Obvious examples of this kind of situation come from recent physics where physicists seem to be telling us some very strange things about the world on the very small scale, which are not obviously logically possible or impossible and cannot be shown to be so by arguments of the kind considered so far, and yet their theories satisfy the above criteria very well—for example, in the respect that they predict a vast range of otherwise unexpected data. In such a case, I suggest, the evidence is evidence that the very strange claims are true, and so logically possible. To deny that would be to deny much of modern physics. Sometimes some theory of physics seems not merely not obviously or demonstrably logically possible, but demonstrably logically impossible if the words of the theory are used in their ordinary senses. It may, however, be that, if we suppose that the theory is using words in analogical senses, then it cannot be shown to be logically impossible or possible by a priori methods. It then follows from what I have written above that, the greater the probability that our evidence would give to that theory (with one or more words in it being understood in analogical senses) if that theory were logically possible, the greater the probability (though smaller than the former probability) that that theory (so understood) is true and so logically possible. I shall develop this point and, I hope, make it plausible with a detailed scientific example when I come to consider the use of words in analogical senses in Chapter 4; and I shall apply this kind of inductive argument later in the book to the logical possibility of some of the claims of theism.

In the case of inductive arguments (such as the one concerning Fermat's theorem) that show some sentence to be (probably) logically impossible or (probably) logically necessary—that is, (probably) inconceivable or such that its negation is (probably) inconceivable—the arguments show that, while we may believe that we can conceive that a certain sentence is true, really we cannot conceive this because there is a hidden contradiction in what we are supposing. This latter is a contradiction of which a being with superior powers would be aware and which we might be able to discover for ourselves at some later stage. In the case of inductive arguments that show some sentence to be (probably) logically possible, and so (probably) conceivable, the

arguments show that, while we may find ourselves (at any rate at present) unable to conceive that that sentence is true, really it is conceivable by a being of superior powers. But, while we can learn that the sentence is conceivable, we cannot ourselves conceive it—that is fully understand what it would be like for it to be true, or make sense of how it could be true. This latter point will prove to be very important when I come to discuss in Part III some of the rather paradoxical claims about God's necessity.

3

Conditions for Coherence:
Metaphysical Possibility

There could be no stronger impossibility than logical impossibility, the impossibility that belongs to a sentence in virtue of it entailing a contradiction; and there could be no stronger necessity than logical necessity, the necessity that belongs to a sentence in virtue of its negation entailing a contradiction. The logical modality of a sentence—that is, whether it is logically impossible, necessary, or possible—is constituted by whether it or its negation entails a contradiction, and is something discoverable a priori, at least by a superior being if not by ordinary humans. But in the 1970s Saul Kripke and Hilary Putnam drew our attention to the fact that there are many sentences that (to express the point in my terminology) are such that neither they nor their negations seem to entail any contradiction, but that seem to be necessarily true or necessarily false with a necessity as strong as that of logical necessity or impossibility. The necessary truth or falsity of these latter sentences depends on logically contingent facts, and so is discoverable only a posteriori—that is, by investigation of the world (as opposed to mere reflection on the meanings of the sentences we use to describe the world)—for example, by scientific or historical investigation. These sentences are normally said to be 'a posteriori' metaphysically necessary or impossible.[1] But note that what makes these sentences metaphysically but not logically necessary or impossible is the fact that the necessity or impossibility depends on some logically contingent fact; that their modal status is discoverable only a

[1] For full discussion of such examples, see Saul Kripke, *Naming and Necessity* (Blackwell, 1980), and H. Putnam, 'The Meaning of "Meaning"', in his *Mind, Language and Reality, Philosophical Papers, vol.* 2 (Cambridge University Press, 1975).

posteriori is a consequence of that. For this reason the normal way of describing these sentences is not ideal, but because it is the normal way I shall conform to it.

Before illustrating how there can be such sentences, let me introduce a technical term introduced by Kripke, 'rigid designator'. A 'rigid designator' is a word (or longer expression) that refers to the same object (substance, property, or whatever), however the object may change in respect of its non-essential properties. The essential properties of an object are those that it must have as long as it exists; if it ceases to have any of them, it ceases to exist. Thus 'occupying space' is an essential property of my desk; if my desk ceased to occupy space, it would cease to exist. By contrast, being 'brown' is a non-essential property of my desk; my desk would still exist, still be the same desk, if it was repainted red. Humans have the essential property of being capable of being conscious; when they lose the capacity for conscious thought or sensation, they cease to exist. Proper names usually function as rigid designators; 'Richard Swinburne' picks out me, whatever my occupation or age, whereas 'The Professor of the Philosophy of Religion at Oxford' referred to me only while I held that position. 'Green' is a rigid designator of a property; it always refers to the same colour property of a substance, whether or not that property has such non-essential properties as 'being Amanda's favourite colour'. But 'the colour of my walls' is not a rigid designator of a particular colour property, since it refers to the colour green only when my walls are green; if they are repainted red, then it refers to the colour red.

Having explained what a rigid designator is, I revert to the thesis of Kripke and Putnam that there are metaphysically necessary sentences that are not logically necessary. Here is an example to illustrate this thesis, adapted from one used by Kripke. Suppose that, in days long before people knew the geography of the Himalayas, explorers named a mountain of a certain visual appearance seen from Tibet 'Everest', and a mountain of a certain different visual appearance seen from Nepal 'Gaurisanker', and used these names as rigid designators of the mountains. Suppose further that these mountains are in fact the same mountain, because they are situated in the same place and are made of the same rocky material; and being the mountain they are, they could not not be that mountain. That mountain, like everything else, is necessarily identical with itself; and so—it seems—'Everest is Gaurisanker' is necessarily true, with as hard a necessity as any logically necessary sentence, and

so metaphysically necessary. What makes it metaphysically necessary is the logically contingent fact that a certain mountain has a certain appearance when seen from Tibet, and a certain different appearance when seen from Nepal. However—we may suppose—the explorers did not know this, and clearly would not have been able to discover its truth by mere a priori means; the necessity of 'Everest is Gaurisanker' could be discovered only by exploration—that is, a posteriori.

Putnam illustrated the thesis that there are metaphysically necessary sentences that are not logically necessary by the example of 'water is H_2O'. Plausibly the word 'water' was used in the early nineteenth century as a rigid designator referring to the actual transparent drinkable liquid in our rivers and seas, and to whatever had the same chemical essence as that liquid. But, in ignorance of what that chemical essence was, people in the early nineteenth century could not be sure whether something (liquid or solid) that was not transparent or drinkable or in our rivers or seas was water. In fact the chemical essence in question is H_2O. And water, being what it is in virtue of having that essence, could not not have that essence and still remain water. So what makes 'water is H_2O' metaphysically necessary is the logically contingent fact that our rivers and seas consist of H_2O. Yet, in ignorance of this fact, the necessity of 'water is H_2O' could be discovered only by scientific investigation—that is, a posteriori.

What has made these necessary sentences 'necessary a posteriori' is that the sentence contains at least one rigid designator of which we learn the sense by being told that it applies to certain paradigm things (especially substances and kinds of substances) having certain superficial features, but where—we are told—what makes a thing that thing (that substance or a substance of that kind) is the essence, physical, chemical, or whatever (of which we may be ignorant) underlying those features; that is, the necessary and sufficient conditions for a thing to be that thing. In these cases we know what the word means, in the sense that we know what are the criteria that determine whether or not the word applies to a kind of substance—for example, the criterion that it applies to a substance iff that substance has the same chemical essence as the stuff in our rivers and seas, but we cannot determine what that essence is. In ignorance of the latter, we do not fully understand what we are saying about a substance when we say that it is that substance or a substance of that kind, and may be unable to recognize the substance or kind when it does

not have the specified superficial features. In this kind of case, unlike the kind of case discussed in the previous chapter, the lack of understanding is something to be cured not by a priori, but by a posteriori investigation. I call such designators 'uninformative designators'; 'Everest' and 'Gaurisanker' (as understood by the early explorers) and 'water' (as understood in the early nineteenth century) are uninformative designators. Most designators, however (and especially designators of properties), are not uninformative. They apply to things solely in virtue of their observable (or experiencable) essential features (or are defined by words that do so) and not in virtue of any essence underlying paradigm examples of things of that kind. I call such designators 'informative designators'. More precisely, for a rigid designator of a thing to be an 'informative designator' it must be the case that anyone who knows what the word means—that is, knows the criteria determining under what conditions it applies to a thing, also knows what those conditions are. It must be the case that such a person knows a set of conditions necessary and sufficient (in 'any possible world'—that is, whatever the world is like in other conceivable ways) for a thing to be that thing (whether or not he can state those conditions in words.) To 'know' these conditions for the application of a designator—as I am understanding this expression—just is to be able (when favourably positioned, with faculties in working order, and not subject to illusion) to recognize where the designator (or, if it is defined in words, the words by which it is defined) applies and where it does not and to know its mini-entailments.[2]

So 'red' is an informative designator; a thing is 'red' iff it looks to most people in daylight to be similar in colour to paradigm objects of the kind discussed in the previous chapter. If we are standing fairly close to some surface in daylight, our eyes are working properly (that is, in the same way as the eyes of most other people), and we are not subject to some illusion, we can recognize whether or not the surface is red. The same goes for most words describing publicly observable properties, such as being 'fragile', '10 metres long', or 'rough'. And the same goes for mental properties such as 'being in pain' or 'thinking about philosophy', of which we experience rather than observe instances. And we know the mini-entailments of an

[2] For a fuller account of what constitutes an 'informative designator', see my *Mind, Brain, and Free Will* (Oxford University Press, 2013), 12–13.

object being 'red'—for example, that it is 'coloured'; and of an object being '10 metres long'—for example, that it is 'longer than an object that is only 9 metres long'. For some words it takes some time to apply the tests for whether they apply—to determine, for example, whether some person is 'influential' or '30 years old', or 'married'. But in none of these cases does it depend on some unknown underlying essence whether or not the word applies. 'Red' designates the observable superficial property of a surface, not the microstructure that underlies it; 'belief that so-and-so' designates an attitude to a proposition, an experienceable property, not the brain structure that gives rise to that attitude.

A word may be an informative designator, not because it itself designates an observable (or experienceable) property, but because it is defined in terms of words that do designate such properties. While 'water' (as used in the early nineteenth century) is an uninformative designator of a property, 'H_2O' (as used by scientists today) is—I believe—an informative designator of a property. Being 'H_2O' is the property of being composed of molecules, each consisting of two atoms of hydrogen and one atom of oxygen. An atom is an atom of hydrogen iff it has a nucleus including one and only one proton, and (unless ionized) is orbited by one electron. (A rare form of hydrogen has in its nucleus also a neutron.) An atom is an atom of oxygen iff it has a nucleus including eight and only eight protons, and (unless ionized) is orbited by eight electrons. (Its nucleus will normally also include eight neutrons, but rare forms of oxygen have in their nucleus also one or two additional neutrons.) (Ionized forms of hydrogen or oxygen may have more or less orbiting electrons.) A proton is a particle of mass 1.67×10^{-27} kilograms, with a positive electric charge of 1.50×10^{-19} coulombs. An electron is a particle of mass 1/1,836 that of a proton with a negative electric charge equal to the positive charge of the proton. So both 'electron' and 'proton' are defined in terms of fractions of quantities (kilograms and coulombs), larger values of which are such that physical scientists can determine their value (when favourably positioned, with faculties in working order, and not subject to illusion.) Thus 'has mass of 1.67×10^{-27} kilograms' is defined in terms of the informatively designated property 'has mass of 1.67 kilograms' and the informatively designated relation of 'being less massive by 1/10 than' (used 27 times). Also we (or rather scientists who know what the words mean) know the mini-entailments of objects having such properties—for example, that a proton is more massive

than an electron, and so exerts a greater gravitational force than does an electron. So 'H_2O' is an informative designator of a kind of substance. And the same goes for many other (though maybe not all) of the rigid designators of kinds of substances referred to by today's physical scientists. We (or at any rate today's scientists) know what we or they are talking about when we talk about 'H_2O'; whereas eighteenth-century speakers did not know fully what they were talking about when they referred to 'water'. They knew the criteria determining under what conditions it would be true that some substance was water (whether it has the same chemical essence as the stuff in our rivers and seas), but they did not know how to apply these criteria to determine what those conditions were and so whether a substance was water. Whether or not a word is an informative designator depends on whether the rules for its current use in the language include rules for applying these criteria in order to know (in the way described above) the necessary and sufficient conditions for an object to be the particular object it is.

Just as there are metaphysically necessary sentences that are not logically necessary, so, for similar reasons, if sentences use uninformative designators, there are metaphysically impossible sentences that are not logically impossible (for example, 'water is not H_2O'); and so there will be sentences that are logically possible but not metaphysically possible. If a sentence uses only informative designators, we understand fully to what we are referring by its words, and so—if we are clever enough—we should be able to determine by mere reflection on what it is asserting—that is, by pure a priori reasoning, whether it or its negation is inconceivable. It therefore follows that a sentence is metaphysically necessary (impossible or possible) iff it is logically necessary (impossible or possible) when we substitute co-referring informative designators for uninformative designators ('co-referring' in the sense that they refer to the same things). Take the sentence 'Everest is Gaurisanker' and substitute for both the uninformative designators 'Everest' and 'Gaurisanker' an infomative designator of the lump of rock—call it 'Rocky'—to which each of these terms refers, and then the sentence reduces to 'Rocky is Rocky', which is, of course, logically necessary. So it is metaphysically possible that 'Everest was first climbed by Chinese climbers' because it is logically possible that 'Rocky was first climbed by Chinese climbers'. Finally consider the sentence 'water is not H_2O' and substitute for 'water' the informative designator of the stuff picked out by 'water'—that is,

'H_2O'; then the sentence reduces to 'H_2O is not H_2O', which is, of course, logically impossible. This account of metaphysical modality will capture as metaphysically necessary (impossible or possible) almost all the examples of the 'metaphysically necessary' ('impossible' or 'possible') offered by Kripke, Putnam, and others. And I cannot see that any recent philosophical discussions of metaphysical necessity have given any reason for supposing that there are any metaphysical necessities (impossibilities, or possibilities) other than ones that are logical necessities (impossibilities, or possibilities) or reduce to these when informative designators are substituted for uninformative designators.

So my concern about whether some sentence is coherent is a concern about whether it is metaphysically possible. It will be metaphysically possible iff it is logically possible when we substitute co-referring informative designators for any uninformative designators; and it will be metaphysically impossible iff it is logically impossible when we substitute co-referring informative designators for any uninformative designators. So a metaphysically impossible sentence (and so the proposition that it expresses) will 'involve' an inconceivable sentence, either because it entails an inconceivable sentence or because it will do so if we replace any uninformative designators by co-referring informative ones. However, any substance, event, property, or time is what it is, whether we refer to it by an informative or an uninformative designator; and so any metaphysically possible (or whatever) substance, event, property, or time is also a logically possible (or whatever) substance, event, property, or time; and conversely. For example, two events are the same if they involve the same substances having the same properties at the same time. So, if the substances, properties, or times involved in an event are picked out by uninformative designators, it will be the same event as one in which those same substances, properties, or times are picked out by informative designators. It is only sentences and the propositions that they express that can have one logical modality (for example, be logically possible) and a different metaphysical modality (for example, be metaphysically impossible); and that is because the sentence is what it is (and so the proposition that it expresses is what it is) in virtue of its meaning and so of the kinds of designators that the sentence uses.

The sentences that I shall be considering in Part II and most of Part III of this book are sentences of the form 'there is a person/being who is

A, **B**, and **C**', where '**A**', '**B**', and '**C**' are informative designators of properties of a kind purportedly possessed by God, some of them ones (such as 'omnipotent' and 'omniscient') defined in terms of observable or experienceable properties (for example, power and knowledge), rather than ones themselves designating observable or experienceable properties. Since all the rigid designators that occur in these sentences are informative rigid designators of properties, if the sentence is logically possible, then it is metaphysically possible (that is, coherent). So I shall discuss the issue of coherence solely in terms of the logical possibility of sentences. Some of these sentences refer to 'possible' (or whatever) events (including actions) and 'possible' substances; since metaphysically possible (or whatever) events and substances are also logically possible (or whatever), it does not matter how the possibility (or whatever) is described, and so, for the sake of simple exposition, I shall describe it as 'logical' possibility (or whatever).

Although I shall often phrase the discussion in terms of whether 'God' 'could' have certain properties, this is to be understood (until we reach Chapter 14) as 'whatever God is like', could he have certain properties, and so the answer does not depend on what is the essence of God. In some places in Chapters 14 and 15 I shall, however, need to consider some sentences in which 'God' is used as a proper name for an individual assumed to exist. Hence the modal status of such sentences will depend on what is the essence of God; and some sentence about that individual (for example, 'God does not exist') might be logically possible without being metaphysically possible. Only at that stage shall I need to utilize this crucial logical/metaphysical distinction.

4

The Words of Theology:
1 Words with Old and New Senses

If the creedal sentences of theology are to express coherent propositions, the words that occur in them must have a sense. In the next two chapters we shall consider how the words of theology get their senses. I propose in this chapter to develop in detail the consequences of two alternative suppositions—that theology uses the words of ordinary language in their normal senses, and that theology gives new senses to the words of ordinary language. Many of the words used by theology are words that have a perfectly ordinary and non-ambiguous use in talking about non-theological matters. 'Wise', 'good', 'powerful', and such like are such words. I will call the senses that they have when used to talk about ordinary or non-theological matters their 'mundane' senses. Certainly theology has some technical terms—for example, 'omnipotent' and 'omniscient'—but it is plausible to suppose that these can be given a verbal definition by the ordinary words—that is, a number of ordinary words can be found that together are equivalent in meaning to the technical terms. For example, it is plausible to suggest that 'omnipotent' means something like 'able to do anything', and 'omniscient' means something like 'knowing all true propositions'. (More careful definitions of these technical terms will be provided in subsequent chapters, but they too will use ordinary words.) The crucial issue is in what senses are the ordinary words used.

Theology Using Ordinary Words in Mundane Senses

I will begin by investigating in detail the consequence of the supposition that theology uses only ordinary words in their mundane senses, together with words that can be given verbal definitions in terms of the former. How on this supposition can theology tell us of a strange and marvellous world so different from the ordinary world of human experience? The answer must be that, although theology uses ordinary words to denote ordinary properties, it claims that the properties cited are manifested in unusual combinations and to unusual degrees. God is a powerful person—but a very very much more powerful person than any person with whom we are ordinarily acquainted. His power, unlike the power of human rulers, is combined with great goodness. Human persons have bodies; he does not. And so on. That we can conceive of a very unfamiliar world by postulating the properties of the familiar world existing in very unfamiliar degrees and combinations was a claim made by Hume, discussed in Chapter 2, and is surely correct. We can describe the existence of people made of plastic, or animals with one horn in the centre of their heads that can fly. We can also describe a world different from ours in that the temporal successions of things are different from those in ours. Curses uttered by anyone who carries a certain wand are immediately followed by the fulfilment of the curse. Teeth planted in the ground are followed by the appearance of humans, and so on. Further, we can describe worlds different from ours in which properties are exemplified to very different degrees from the degrees in which they are exemplified in our world. We can talk about a world where humans are 2 inches tall, or alternatively a world where humans are 20 foot tall; and a world where objects shine with a brightness brighter than any object in ours, and there are animals far stronger than the strongest dinosaur who has ever lived on earth. We can do this because we have derived from experience the concepts of various properties exemplified to differing degrees, and can thus conceive of an object that has even more of the property than one that we have observed. Schematically, we observe several objects, a, b, c, d, each of which is more-φ than its predecessor. Thus we derive from experience the concept of being more-φ than some other object. Then we can conceive of an object which is more-φ than d, although we have never observed

one.[1] So in both these ways we can use our old words to describe worlds very different from ours.

Some science clearly uses ordinary words in ordinary senses to describe things beyond our experience. In the example of H_2O discussed in the previous chapter, I argued that 'mass' and 'electric charge' are used in ordinary senses. More generally, the proponent of the atomic theory of chemistry tells us that solids, liquids, and gases consist of millions of molecules, that molecules are groups of atoms, and that atoms are very small particles. Here it seems that 'particle', 'group', and 'consist of' are being used in their ordinary senses (as 'informative designators'); but the chemist is claiming that there are particles different in size from those previously known. (However, when talking about fundamental subatomic particles, while 'consist of' and 'group' may be being used in their ordinary senses, it is not so plausible to suppose that 'particle' is being used in its ordinary sense, and I shall return to this point later.)

Of course, sometimes it is not logically possible for a substance to have each of two properties; nor, similarly, is it logically possible for every property to take any mathematical value. (For example, because of the way temperature is defined, bodies cannot have a temperature lower than –273 degrees Centigrade.) The issue therefore arises whether the theologian or scientist is contradicting himself in prising words out of their normal context and postulating their application to an object of a very different kind from that to which they are normally applied. Herman Philipse has argued recently that, because 'the paradigm examples of persons specified by the semantic rule are all human beings, that is bodily things', God cannot be said to be a 'person' in a literal sense.[2] But, as should be evident from the discussion of concept empiricism in Chapter 2, those paradigm examples have many properties in common

[1] This point was inadequately appreciated by Hume. If he had properly appreciated it, he would have been less worried by his example of the missing shade of blue. (See his *Enquiry Concerning Human Understanding*, sect. 2.) Why we can conceive of a certain shade of blue, and indeed imagine it, although we have never observed an instance of it, is because we have observed instances of other shades of blue and instances of the concept of being darker-in-blue-than. We can thus conceive of a shade darker in blue than a certain shade that we have seen.

[2.] Herman Philipse, *God in the Age of Science?* (Oxford University Press, 2012), 110. For an earlier example of just the same pattern of question-begging reasoning, see Antony Flew, *God and Philosophy* (Hutchinson, 1966), 37.

besides being 'bodily', most of which play no role in determining the normal sense of 'person'; and so syntactic rules are needed to distinguish the normal sense from other possible senses, and thus to determine whether 'being bodily' is essential to being a 'person' in the normal sense. Philipse then purports to discuss these rules by claiming (correctly) that many predicates (for example, 'intends to go for a walk') that can apply to embodied persons could not apply to a bodiless person. But that does not settle the issue of whether it is a rule of language that it follows from someone being a 'person' that such predicates are applicable to them. If it is a mere logically contingent truth that such predicates always apply to persons (for example, that all actual persons are such that it makes sense to suppose that they can intend to go for a walk), no consequences follow about whether it is logically possible for there to be a non-embodied person (in a literal sense of 'person'). Only if it is a rule of language that it follows from someone being a 'person' that predicates such as 'intends to go for a walk' are applicable to him would it be involved in the literal meaning of 'person' that being a 'person' entails being 'embodied'. I shall argue in Chapter 7 that this is not involved in the literal meaning of 'person', using a 'direct' argument of the kind analysed in Chapter 2.

Note that, if we do say that such a word as 'good' is being used in the same sense in 'God is good' and in 'Florence Nightingale was good', that does not mean that God's goodness is not very different from Florence Nightingale's. It is the nature of the substance to which a property belongs that determines what difference having that property makes to it. This is clear from trivial examples. I and my filing cabinet are both said truly to 'weigh 10 stone'. Yet weighing 10 stone makes a different difference to me from the difference made to the filing cabinet by weighing 10 stone. The former is 10 stone of flesh and blood, while the latter is 10 stone of steel and paper. My 10 stone can be reduced by my eating less and taking more exercise; the 10 stone of the filing cabinet cannot be reduced in these ways. But all of this does not mean that 'weighs 10 stone' is being used in different senses, to denote different properties. It is simply that the instantiation of the property of weighing 10 stone makes different differences to different kinds of thing. So what it is for God to have the property designated by 'good' in the mundane sense depends on what sort of being God is (which will

depend, at least in part, on which other properties—for example, being omnipotent or being our creator) God has.

Theology Using Words in New Senses

The alternative to supposing that theology uses ordinary words in their mundane senses is to suppose that it gives to old words new senses; that 'wise', 'powerful', 'person', and so on are given new senses on their introduction into theology. Now quite obviously such words are not given *entirely* new senses in such a case. There is more in common between 'wisdom' attributed to God and 'wisdom' attributed to humans than between 'wisdom' attributed to God and 'folly' or 'weighing 10 stone' attributed to a human; and more in common between 'being a person' attributed to God, and being a 'person' attributed to a human than between 'being a person' attributed to God and 'being a mammal' attributed to a human. So what must be happening is that the theist is giving analogical senses to any words that are not being used in their mundane senses, so that they apply to God as well as to humans. I understand by a word being used 'analogically' in one sense with respect to some other sense that it has some but not all of the same mini-entailments and/or some but not all of the same paradigm examples of its correct application as in the other sense. It will follow from that that it will not apply to all the same objects. We can come to understand what the new analogical sense is by being explicitly taught new syntactic or semantic rules for its use. In the following discussion I shall continue to assume, as I stated in Chapter 2 that I would normally do, that speakers acquire the same beliefs about the meanings of words and sentences by the same training.

When a person is said to 'see' the force of an argument as well as to 'see' a tree, in both cases 'see' mini-entails 'become aware of', 'perceive', and 'notice', but in the first and not the second case it mini-entails 'grasp' and 'is struck by', and in the second case but not the first it mini-entails 'has a visual impression of', 'perceive by some sense organ', and 'look in the direction of'. When a person is said to have a 'rough' manner, and a floor is said to have a 'rough' surface, in both cases 'rough' mini-entails 'rugged' and 'unpolished', but in the first and not the second case it mini-entails 'gruff' and 'impolite', and in the second case but not the first it mini-entails 'uneven' and 'not flat'. And so in these cases the first sense is

analogical with respect to the second sense. And, for similar reasons, 'sharp', 'blunt', 'smooth', and 'deep' have one sense when used of inanimate material objects and a different sense when used of people. The consequence of these different mini-entailments is that the words used in one sense do not apply to most of the objects to which the words used in the other sense apply.

Since using a word 'analogically' involves using it so that it preserves some but not all of its previous meaning, it would seem natural also to count a word as being used 'analogically' if it is used more widely in one sense than in another sense, so that in one sense it applies to all the objects to which it applies in the other sense and then some further objects as well. For example, 'a planet' used to mean a heavenly body that moves around the earth or sun in the way that the paradigm planets such as Mars or Jupiter move. But now it is used so as to apply to any heavenly body that moves around any star (including the sun) in a nearly circular elliptical orbit. A 'telescope' used to mean any instrument that bends light rays coming from a distant object in such a way as to make the object look the way it would look if you were looking at it from a closer location, and so to show details not otherwise visible. But now a 'telescope' is any instrument that bends any electromagnetic waves (not only ones in the visible light part of the electromagnetic spectrum), so as to provide information on details of distant objects not otherwise accessible. Hence there are 'radio telescopes' as well as light telescopes.

I now suggest that some words are used in theology in senses analogous to their mundane senses, and that people are introduced to these senses by being given amended syntactic and semantic rules for their use. I suggest that these amendments always have the consequence that these words are used in a wider sense than their mundane senses. So I suggest that the syntactic rules are amended simply by abandoning some of them, so that saying that God is a 'person' does not mini-entail some of the consequences that it would entail if it was used in its mundane sense.

It is sometimes suggested that the old words, by which God is defined, such as 'person', 'good', 'wise', 'powerful', and 'merciful', are given new senses by new paradigm examples of their correct application being provided by the peculiar and private experiences of the religious believer. If you want to know what God being 'merciful' means, an evangelical

Christian might say, get down on your knees and ask God to forgive your sins and you will feel it. If you want to know what God being 'powerful' means, ask for his help and you will feel it. I am expressing this view by rather crude examples, but they do illustrate the basic idea, that the sense of theological terms is to be explained in part through the experiences of the religious believer. But a word can be given a sense in a language only by means of public examples of its correct application. Now clearly, if the examples all come from the religious experiences of theists, the theist cannot use them to explain to the atheist what his claims mean. And he cannot even use them to explain what the claims mean to other theists, for some theists do not have religious experiences of kinds that cannot be described by words used in mundane senses; and, even if theists do have experiences that can be described in this way, they would need to have the same kind of experiences at the same time if such experiences are to be the means of giving a sense to theological words. If someone is to learn the meaning of 'W' by means of paradigm examples of things that are **W**, then he must be told when he is experiencing **W** things, that he is experiencing **W** things. But, if no one knows when the learner is having a religious experience of some object or property **W** (because no one else is necessarily having one at the same time), then no one else can tell him that the experience that he is having is an experience of a **W** thing. Yet those who have religious experiences do not claim to have them simultaneously. One person on his knees may claim to have an experience, while the person next to him (equally given to making claims about religious experiences) may claim not to have had any experience on that occasion. Even if two people kneeling together both claim to have a religious experience at the same time, they normally give very different descriptions of it. All of this is not to deny (or to affirm) that veridical religious experiences occur. But it is to point out that they are not a sufficiently public and objective phenomenon for them to be a means of giving senses to words. (Although, as I claimed above, religious experiences are 'normally' private, there are occasional reports of public visions—for example, of Mary appearing to a number of observers at the same time. But there are far too few such apparent public visions to provide paradigm examples of the correct application of theological terms to give senses to those terms that are used by innumerable religious believers who have not witnessed such apparent public visions.) I conclude that the suggestion that ordinary words are

given a new sense in theology through new paradigm examples of their correct application being provided by the experiences of the religious believer is not a fruitful one.

The theist never gives any other public examples of 'persons' than those that we would normally call persons, or of 'good' deeds other than those that we would normally call 'good'. Some have certainly supposed that some examples of actions described in the Bible (for example, actions done by Jesus) are better paradigms of 'good' actions than any other ones, but many an atheist could agree with that, and it is certainly not enough to suppose that that gives a new sense to the word 'good'; it shows at most a small disagreement about which actions are 'better' than other ones in a common sense of 'good'. I conclude that the semantic rules for the use of a word are never amended by the theist providing new paradigm examples of their correct application.

What does seem to happen to the semantic rules for the use of a word is that the theist modifies the role of the paradigm examples, so as again to give rise to a wider sense to the word than the mundane sense, in consequence of which it would apply to more kinds of object than in its mundane sense. We saw in Chapter 2 that the most common way in which the semantic rules for the use of a word 'W' operate is that certain paradigm examples of its correct application are provided, and then an object is said to be correctly described as 'W' if it resembles the paradigm objects in the respect in which they resemble each other. We saw also that there are ways in which this rule can be filled out more informatively, by specifying the degree of resemblance required and contrasting the paradigm objects with paradigm objects to which the word would not apply. Such a more informative rule can be modified by reducing the degree of resemblance required and/or reducing the extent of the contrasting class of 'not-W' objects. I shall suggest that the modification to the rules used by the theist consists in an object being correctly called 'W', for example a 'person' (in the new use) iff it resembles the paradigm examples of 'W' objects (persons) in the respect in which they resemble each other more than it resembles paradigm examples of objects which are 'not-W', where the paradigm examples of 'not-W' objects do not include all the examples that would have been such examples under the old rule for 'W'.

If such a modification of the semantic rules is to have much effect in generating a clear new sense of 'W', it must be accompanied by a

modification of the syntactic rules. Thus it may be an old syntactic rule that, if an object is 'W', then it is 'X'; and if it is 'X', then it is either 'Y' or 'not-Z'. 'Y' and 'Z' may, like 'W', be words given a sense in part by paradigm examples—that is, by semantic rules. Suppose that the sense of 'Y' and 'Z' is not changed and so that their semantic rules remain the same; and that the syntactic rules for 'W' remain the same. Then, although the new semantic rules for 'W' might by themselves allow various objects rightly to be called 'W' that were not so called previously, nevertheless by the semantic rules for 'Y' and 'Z' those objects might count as 'Z and not-Y'. In that case, since both sets of rules have to be satisfied, if the syntactic rules remain the same the objects will be 'not-X' and hence 'not-W'. What the modification to the semantic rules would by itself let into the class of 'W' objects would be excluded if the syntactic rules remain the same. So, to produce a significant change in the sense of a word, almost any change in the semantic rules for its use must be accompanied by a change in the syntactic rules. For, only if we know what follows from the application of a word do we have a clear understanding of what that word means. And, if what follows is the same as before, it is not clear how the sense can be very different.

Since the sense of some words is generated by syntactic rules alone, syntactic rules can be changed without there being any need for new paradigm examples either of actual objects or of objects described by words that already have senses. We can widen the sense of a word by removing some of its mini-entailments, without specifying which (if any) new objects will be paradigm cases of its application in the new sense. It may be a simple matter to amend the syntactic rules in this kind of way. There may be a single isolated rule that says that you can deduce from 'X is W' that 'X is not-P', which can be dropped. Or it may be that the concepts of **W** and **P** are interwoven with many other concepts, so that a number of syntactic rules have to be altered in order for the cited inference no longer to hold.

I illustrate the point about the different kinds of amendment to rules needed to secure some result, from a philosophical controversy. Consider the word 'cause'. Semantic rules provide many paradigm examples of '*E* caused *F*', and there are various syntactic rules such as that '*E* caused *F*' entails 'if nothing else caused *F* and *E* had not happened, and *E* not happening would not have caused anything else to cause *F*, *F* would not have happened'. The majority of philosophers agree, as I shall also claim

in Chapter 9, that it is not logically possible that a cause be later in time than its effect. But why is this not logically possible? It may be that there is an isolated and detachable syntactic rule that '*E* happened at t_1' entails 'if *E* has a cause, that cause did not occur later than t_1'. A number of writers have in effect urged this when they have claimed that the temporal priority of causes was a 'mere convention for the use of words',[3] which does not reflect anything deep about reality. Their claim seems to amount to the claim that, if you dropped their explicit syntactic rule (and perhaps one or two other closely connected syntactic rules), but kept most of the syntactic rules and all the semantic rules, then you would have a concept of 'cause' very similar to our present one, but such that it is logically possible for a 'cause' to follow its 'effect'. Other writers have urged that the syntactic rule in question cannot be isolated, but follows from other syntactic and semantic rules, many of which would have to be dropped if we were to allow a 'cause' to follow its 'effect'. Thus R. M. Gale claimed that a whole range of syntactic rules would have to be altered—the rules connecting 'cause' with 'action', 'intention', 'memory', 'past', 'future', and such like, and the (syntactic and semantic) rules for the use of these words.[4] Our understanding of an event being 'past' is that, after it has occurred, it is 'unalterable'; the 'future', on the other hand, is such that a strong enough 'agent' could always make it different from the way it would be otherwise; we cannot learn about a 'future' event from its effects and so cannot 'remember' it, and so on. I shall be arguing in Chapter 9 that Gale's view is the correct one; changing the logical connections between 'cause' and 'effect' would involve changing the rules for the use of many other words. Meanwhile I am merely using this controversy to illustrate my point about the different kinds of amendment to rules necessary to secure some result. And clearly, if we alter all the rules connecting 'cause' with these other words, 'cause' will mean something very different from what it meant previously, and the view that a 'cause' cannot follow its 'effect' will mean something very different from what it meant previously. (I shall, however argue in

[3] See Roderick M. Chisholm and Richard Taylor, 'Making Things to Have Happened', *Analysis*, 20 (1960), 73–8: 'This seems to be merely a point of vocabulary . . . If we do not thus secure the principle by stipulation . . . then there seems to be no reason for supposing that causes must precede their effects' (p. 74).

[4] See R. M. Gale, 'Why a Cause Cannot Be Later than its Effect', *Review of Metaphysics*, 19 (1965), 209–34.

Chapter 14 that, in order to explain one radically unique event, we do need to use 'cause' in a somewhat different sense from the normal sense, and that this involves altering the syntactic and so semantic rules for the use of 'cause'—solely in that context—in a few respects, but not nearly in as many respects as we would need to do if we were to allow a cause to follow its effect.)

When the sense of a word 'W' is modified by altering a few of the semantic and/or syntactic rules for its use, the word has come to be used (by comparison with its old use) 'analogically'.[5] The change of rules means that 'W' comes to designate, not the old property **W**, but a different property **W***. (I am using capital letters in ordinary type enclosed by inverted commas—for example 'W'—to designate predicates (that is, words) and bold capitals to designate properties.) If the change involves simply requiring a smaller resemblance to the paradigm examples of objects to which it applies and abandoning some of its mini-entailments, then the new concept of **W*** will be logically possible if the old one was. (By a concept being logically possible, I mean that it is logically possible that it apply to some object. Hence a concept is logically impossible only if it is not logically possible that it apply to anything.) For the effect of loosening-up can only be that the new concept applies to more (or anyway no fewer) conceivable things than the old one did. So, if it was logically possible that the old concept apply, it will be logically possible that the new one apply. Hence an effect of the loosening-up may be that sentences that previously expressed logically impossible propositions now express logically possible ones.

It may well be now that, although it was not logically possible to suppose that an object be **W** and also **P**, it is logically possible that it be both **W*** and **P**. Or, if that is not logically possible, the word 'P' denoting **P** could be given an analogical sense so that it now denotes

[5] The account of analogy that I have given in this chapter is in effect the same as the one that I gave in a different terminology in my book *Revelation* (2nd edn, Oxford University Press, 2007), 38–43. There, following J. F. Ross (*Portraying Analogy* (Cambridge University Press, 1981)), I defined token words of the same or different types as univocal (having the same senses) iff they have the same synonyms, antonyms, contraries, etc; as analogous (having senses analogical to each other) iff they have some of the same synonyms, etc; and equivocal iff they have none of the same synonyms, etc. But these definitions amount to the same as those given in this chapter, since to the extent to which a word in a new use has different synonyms etc from those that it had in its previous use, to that extent its syntactic and semantic criteria have been altered.

P*, and it could be logically possible to suppose that an object be both **W*** and **P***. The methods for showing logical possibility or impossibility described in Chapter 2 could in theory be used to show that these suppositions were or were not logically possible. The direct method of showing logical possibility is to give an obviously logically possible sentence using ordinary words in mundane senses, which entails that some object is both **W*** and **P***. Or perhaps reflective equilibrium might show this by finding a simple principle that fitted what we are inclined to say about the logical modality of many different sentences using 'W' to designate **W*** and 'P' to designate **P***.

However, neither the direct method nor reflective equilibrium is very likely to yield clear results about the logical modality of sentences using words in analogical senses, unless any new semantic rules say which actual objects (as opposed to ones described in words) which are not **W** and **P** are **W*** and **P***. If we can actually observe examples of such objects, we will get a grip on what is involved in the new usage; but it would be open to question if we have only a description in words of the kind of objects that are said to be **W*** and **P***, whether that description itself is a logically possible one. If the semantic rule for the use of 'W' is that an object is correctly called 'W' iff it resembles certain paradigm objects in the respect in which and to the extent to which they resemble each other, we have a fairly clear idea of the limits to the use of 'W'. But if we loosen the rule and say that an object is correctly called 'W' even if it does not resemble the paradigm objects as much as they resemble each other, so long as it resembles them more than it resembles certain paradigm 'non-W' objects, then it will be much less clear about what kind of objects there could be that we have not experienced that would now be correctly called 'W'.

As we saw in Chapter 2, to prove by the direct method the logical possibility of some proposition, we need to agree on some other supposition that is evidently logically possible. But, in so far as now strange unexperienced things quite dissimilar from paradigm examples of W objects could in theory be correctly termed 'W', it becomes unclear what suppositions about things that are **W*** (namely, things correctly called 'W' in the new use of this term) are evidently logically possible. One person may think that it is evidently logically possible to suppose that an object be 'both W and P', and another person be altogether unsure about this. And, even given agreement on some obviously

logically possible premisses, the fewer syntactic rules we have for the use of a word, the harder it will be to show that they entail some disputed sentence. Reflective equilibrium begins with a set of clear examples of logically possible (impossible, or necessary) sentences, and tries to extrapolate a principle in virtue of which they have this status. But, if the only agreed examples with which we can begin are those in which the word is used in its mundane sense, we cannot use examples to derive a principle applicable to a new sense, different from the old one. So neither of the a priori methods described in Chapter 2 is likely to help us to detect whether a sentence that is logically impossible when words are used in their mundane senses is logically possible when words are used in analogical senses. The best hope is one of the inductive methods described in Chapter 2, and I will illustrate the application of these methods in areas other than theology, shortly.

It should be clear from the above discussion that analogy is a matter of degree; the more semantic and syntactic rules we loosen up, the more stretched is the analogy between the new sense of a word and its old sense, and the harder it becomes to prove the logical possibility or impossibility of a proposition expressed by a sentence using the word in its new sense. If theology widens the senses of words in the ways that I have described, it is in no way unique in this. Science does so, and I shall shortly illustrate this from Quantum Theory. One can also readily conceive of people other than professional scientists giving words analogical senses in order to describe phenomena that evade normal description, and I shall begin the next section by giving an example of that.[6]

Non-Theological Examples of Words Being Used in Analogical Senses

Suppose a community of humans born blind, isolated from sighted humans. They are intelligent and have their other senses well developed. They learn to distinguish between the objects of touch, the objects of hearing, the objects of smell, and the objects of taste. They learn to

[6] There is a powerful plea to philosophers to recognize the value of using words in extended senses in order to express ideas that would otherwise be inexpressible in F. Waismann, 'Analytic–Synthetic', in his *How I See Philosophy* (Macmillan, 1968); see pp. 172 ff.

describe the objects of touch as 'hard' or 'soft', 'sharp' or 'blunt', 'rough' or 'smooth'; the objects of hearing as 'loud' or 'quiet', 'high' or 'low'; the objects of 'smell' as 'sweet' or 'acrid'; the objects of taste as 'sweet' or 'sour', and such like. But of course they have no words for describing colours. They learn that the objects of touch are the real constituents of the world, the public objects whose public properties all humans feel; while the objects of hearing, smell, and taste are mere effects produced by the public objects. So to say that an object is 'rough' entails that it is a public object that can be detected by feeling. A blind genius then suggests that, although 'we' have only four senses, it is logically possible that humans might have a fifth. Through that fifth sense humans could learn about other properties of objects undetectable by the four senses. He attempts to describe what these properties might be like. All surfaces, he suggests, might be characterized by them; but they would differ from the properties detectable by touch. You would not have to touch an object to detect these new properties. Words fail him to describe the properties adequately, but he suggests that 'loud' and 'sharp' used in analogical senses would provide quite a good descriptions of one of these properties, and that 'quiet' and 'blunt' would provide quite a good description of another property incompatible with the first property. In suggesting analogical uses of these words, he suggests amending the syntactic and semantic rules governing their use in two ways as follows. In order for an object to be 'loud' or 'sharp', it would have now to resemble paradigm examples of loud or sharp objects in the respect in which they resemble other loud or sharp objects, no longer as much as these paradigm objects resemble each other, but merely more than they resemble paradigm examples of quiet or blunt objects; for example, it has to be more like the noise of humans shouting than like the noise of humans whispering. And similar rules would apply to 'quiet' and 'blunt'. The genius also suggests an amendment to the normal syntactic rules that if something is 'loud' or 'quiet' it is a 'noise' (and for that reason the effect of a material object and not a property of a material object). He suggests that the rule could be amended so that it follows deductively from something being 'loud' or 'quiet' either that it is a 'noise' or that it is a property of a surface of an object. However, some other syntactic rules for the use of the relevant words would remain—for example, that, if an object is 'loud', it is not at the same time 'quiet', and that being 'sharp' or 'blunt' is a property of a surface. In proposing a wider use of the words 'loud' and

'quiet', the genius is giving us two models for things being 'loud' or 'quiet' in the wider sense; they are like some sounds, in being 'loud' or 'quiet' in the old sense, but also like some properties of surfaces such as being 'sharp' or 'blunt'. He is postulating the existence of properties common to sounds and surfaces.

Why should the blind community believe the suggestion of their genius that it is logically possible that there be surfaces of material objects (and so material objects themselves) that are 'loud' or 'quiet' in these new senses? If he could actually show his community such an object, that would prove his point. If he could describe such an object in an evidently logically possible way using ordinary words in their existing senses, then he would also have shown that there could be such objects. But, if such objects are, from the point of view of the blind community, as strange as they are said to be, it is doubtful whether a sufficiently full and evidently logically possible description of them using ordinary words in ordinary senses could be given for it to be deducible from that, for example, that in the suggested analogical sense the object is 'loud' but is a surface and so not a 'noise'. It may well be that he cannot prove the logical possibility of his supposition by any direct or semi-direct method. In that case the supposition is unlikely to be very well received in the community, and many a sophist may attempt a quick proof of its logical impossibility. And, if the genius is not very explicit about the analogical senses in which he is using his words, many may be convinced by the sophists. But, if the genius makes it clear what he is doing, a proof of logical impossibility will be less easy to obtain. For it would be just as difficult to prove the logical impossibility as to prove the logical possibility of his supposition. The less rules there are to delimit the application of the words 'loud' and 'quiet', the less easy it will be to show that it could not apply to a material object or surface thereof.

What will settle the matter? It is hard to think of any compelling proof of logical possibility or impossibility that did not involve giving the blind humans sight, and so enabling them to see what the genius had in mind. But there could be inductive arguments of the kinds that I discussed at the end of Chapter 2, which might make it probable that the genius's supposition was logically possible, in the form of evidence making it probable that there actually exists a property of a surface of a material object that is more like the loudness of a loud noise than like the quietness of a quiet noise, yet all the same not very like the loudness of

a loud noise. I illustrate this by showing how the genius's supposition could be shown to be probably logically possible by an argument of the first kind of inductive argument discussed in Chapter 2.

It might be that the blind people meet sighted humans who report that they are all the time aware of properties of surfaces that they are not touching, which they call 'colours'. They use words such as 'red', 'yellow', 'pale', 'light', and 'dark', 'multicolour', 'of uniform colour', 'bright', and 'dim' in describing these properties. Asked for an account of the sense of these terms, the newcomers are for a start much puzzled as to how to give an account. But they then say such things as follows: 'The difference between "bright" and "dim" is rather like the difference between "loud" and "quiet" or between "sharp" and "blunt"; the difference between "multicoloured" and "of uniform colour" is like the difference between "rough" and "smooth"; or more precisely, following Locke, "scarlet is like the sound of a trumpet"'.[7] The newcomers prove reliable witnesses in other respects, and they corroborate each other's testimony about 'colours'. Hence the blind community have evidence in the form of testimony that makes it probable that the state of affairs that the genius has suggested to be logically possible probably actually occurs, and hence is probably logically possible and so conceivable.

I now illustrate the application of the second kind of inductive argument discussed at the end of Chapter 2 to showing that some supposition described by words used in analogical senses is probably logically possible. What is light? Since the sixteenth century there have been two views—that light radiating from a source consists of a stream of particles, and that it consists of a wave in a medium. Until the beginning of the twentieth century it was thought that one or other view was the correct one, and they held alternate dominance. The wave theory originally held that light was a disturbance in a material medium, ether, which filled all space; the propagation of light consisted in the propagation of a

[7] John Locke, *Essay Concerning Human Understanding*, III.4.11. Locke seems to claim that his 'simple ideas', that is, particular tastes, sounds, colours, etc., have virtually nothing in common, do not resemble each other significantly more or less. Locke used the quoted sentence to make the point that the blind could not come to know much about colours by knowing merely the proposition expressed by that sentence. However, Locke's point seems simply false. Surely one colour can be more like a second colour than like a third; and there are significant resemblances between objects of different senses—scarlet is somewhat like the sound of a trumpet, bright surfaces are somewhat like loud noises, bitter tastes are somewhat like acrid smells, etc.

disturbance in that medium. Later the wave theory took the form that the wave was an electromagnetic wave; that is, the propagation of light consisted in a continuous change of the electromagnetic field (which is a field of force and not a material thing) at all the points of space involved. But on both versions of the wave theory what was propagated was a disturbance, a change in the state of things at the places along the path of the wave without any material object moving along that path. But on the particle theory the propagation of light along a path consisted in the motion of particles, material objects, along that path. Since 1905, however, neither theory can be regarded as having been in exclusive possession of the field. Many phenomena are known that are fully explained by the theory that light is a wave and seem quite inconsistent with the particle theory. Among these are diffraction and interference. Yet many other phenomena are known that are fully explained by the theory that light consists of particles and seem quite inconsistent with wave theory. Among these are the photoelectric effect and the Compton effect, and, above all, the fact that, when very weak light irradiates a photographic plate, a lot of tiny blobs appear on the plate and not a very weak smear over the whole plate, as wave theory would suggest. So neither theory seems fully adequate to the phenomena.

There have been many attempts to construct more adequate theories, but no theory that gives an easily comprehensible account of the nature of light has yet had any success in explaining (old or new) phenomena. What we do have is Quantum Theory, a highly sophisticated piece of mathematics, which allows us (when we have learnt the rules for applying it to a concrete situation) to predict within a range how light will behave, and also to predict a vast number of other physical and chemical phenomena. But science is not merely a predicting device. Another function that science has successfully fulfilled in so many other fields is to tell us what the world really consists of, what are the entities of which the world is made, and what are the laws of their interaction. The atomic theory of chemistry was not merely a predicting device: it told us what a pint of water consisted of—a large finite number of molecules—and what each of these consisted of—two atoms of hydrogen and one of oxygen. What now of Quantum Theory in this respect? What does it tell us about the world on the very small scale?

One alternative, basically that adopted by what is known as the Copenhagen Interpretation, is to abandon this ideal of describing the

world. According to the Copenhagen Interpretation, Quantum Theory is just a predicting device, and does not tell us about what the world is like. It is natural to adopt this interpretation if we assume that 'wave' and 'particle' are used in their ordinary senses. For in that case we cannot interpret the data by saying either that (*a*) light is sometimes particles (for example, when it shows the photo-electric effect) and sometimes a wave (for example, when it shows interference phenomena), or that (*b*) light is always particles and always a wave. For (*a*) is immensely implausible, since all our evidence is that any one beam of light can be made to show either kind of effect. And (*b*) is evidently logically impossible—particles are material objects and waves are not.

Yet to adopt the Copenhagen Interpretation is not merely to abandon the scientific ideal of describing the world; it is to do so when the two accounts of what light is are in their respective fields remarkably successful. In exhibiting interference phenomena light behaves exactly like a wave; in making blobs on a photographic plate light behaves exactly like a stream of particles. The alternative to the Copenhagen Interpretation is to say that light is both 'particles' and 'a wave', only in extended senses of the terms that do not exclude each other. I believe that this second, realist alternative is in effect that adopted by the majority of scientists. In this case what is happening is that, in the face of pressure to say two incompatible things about light, words are being given analogical senses, in order to remove the incompatibility. In giving an analogical sense to 'wave', we loosen the semantic rule so it states only that an object is a 'wave' iff it is like water waves, sound waves, waves in oil and lemonade, and electromagnetic waves, in the respect in which they are like each other more than are paradigm examples of objects that are not waves (for example, billiard balls, grains of sand, and cherry stones). In giving an analogical sense to 'particle' we loosen the semantic rule so it states only that an object is a 'particle' iff it is like billiard balls, grains of sand, and cherry stones in the respect in which they are like each other more than are the paradigm examples of objects that are not particles (for example, water and sound waves). We also drop the explicit syntactic rules that, if anything is a 'wave' (a disturbance in a medium), it is not also a 'material object'; and, if anything is a 'particle', it is not also a 'disturbance in a medium'.

With the new analogical senses of 'wave' and 'particle', is it logically possible that there exists something, light, that is both a stream of 'particles'

and a 'wave'? I know of no direct or semi-direct a priori argument that it is or that it is not. But a vast range of data make it very probable indeed that Quantum Theory would be true if it were logically possible, and that in turn surely makes it probable (a bit less probable than 'very' probable) that it is true and so logically possible; and so that the claim that light is both a 'wave' and a 'particle' in analogical senses of these words is logically possible. If this is correct, it illustrates the second kind of argument sketched at the end of Chapter 2, and confirms my claim there that arguments of that kind are cogent inductive arguments showing some sentences to be (probably) logically possible, and so (probably) conceivable. But note that, both in the imaginary example of the community of blind people and in the example of Quantum Theory, while inductive arguments may show that some claim is conceivable, they do not enable investigators (the blind community or present-day scientists) to conceive it—that is, to understand what it would be like for it to be true, or make sense of how it could be true.

With Quantum Theory interpreted thus realistically, we have, as in the imaginary example of the community of blind people, what I call a two-model situation. Philosophers of science have often used the notion of a 'model' to analyse the activity of scientists. When a scientist postulates some kind of entity ϕ to explain certain phenomena, and says that entities of kind ϕ are like and behave like some familiar observable entities of kind ψ, we may say that ψ is a 'model' for ϕ. Thus, to use again an earlier example, the atomic theory of chemistry explains various observable chemical phenomena in terms of observable substances being composed of very many atoms of different kinds, which interact in various ways. The chemist is not content merely to provide a formula that allows prediction of new chemical phenomena. He wishes to tell us what chemical substances really consist of and what is really going on, as a result of which we observe the phenomena that we do. He must, therefore, tell us something about these 'atoms'. He says that they are very small particles. They are like billiard balls—not, of course, in many ways (in being red, shiny, and used for playing billiards)—but in many other ways (in being hard, round, and inelastic). Billiard balls or particles are the model for atoms. I. T. Ramsey introduced the terminology of models profitably into theology.[8] He wrote of 'models' and 'qualifiers', the qualifiers being expressions stating the respects in which the model does not apply.

[8] See, e.g., Ian T. Ramsey, *Religious Language* (SCM Press, 1957).

Now the situation in Quantum Theory is a two-model situation. The postulated entities, such as photons, the units of light, have some of their properties in common with waves and some in common with particles, and there is no one model that we can provide for both. There are around us no familiar phenomena that resemble the postulated photons more than either of these phenomena, and they resemble them very much equally. If we have two models for a postulated entity, we have necessarily to use words in analogical senses if we are to describe that entity. For, since it cannot resemble both of its models very closely (since they are incompatible models), we can describe it only in terms of the two models by giving extended senses to the words used for describing the models. The fact that we can give such an analogical interpretation of theories that do not admit of an interpretation with words used in ordinary senses is of great interest. For our ability to do this is clearly independent of whether in fact Quantum Theory is true. If it can be done for Quantum Theory when we have good grounds for believing Quantum Theory to be true, it can be done for any other theory when we have grounds for believing it to be true.

I shall argue in due course that some central claims of traditional theism could be logically possible only if some of the words that occur in the sentences by which they are expressed have different senses from their mundane senses. In that case, the words must be being used in analogical senses, since, for reasons given above, it is not plausible to suppose that the words have been given totally new senses. But clearly the more words are used in analogical senses, and the more stretched those senses (that is, the more the rules for the use of the words are altered), the less is the information conveyed by the use of the words. If theology uses too many words in analogical senses, or loosens up the rules for their use too much, it will convey virtually nothing by what it says. The claim that he is using words in an analogical sense must be for the theist a last resort to save his system from a charge of incoherence that would otherwise stick. The 'analogical sense' card is a legitimate one, as the examples that I have adduced should show, but it is like a 'joker' in a card game that can be played only once, or perhaps twice!

Unless there is reason to suppose otherwise, clearly we should assume that theists are using words in their mundane senses. In order to interpret any text one should always make the initial assumption that words are being used in ordinary senses, unless the writer or the context

indicates otherwise. I shall argue that on some versions of theism there is never any reason to suppose that words are ever being used in other than mundane senses. I shall, however, argue, as I have written, that most theists have wanted to make claims that will be logically possible only if we suppose that some words are being used in analogical senses. But, even so, we need not suppose that all words are being used in analogical senses. When the theist says that God is 'good', 'good' is, I suggest, being used in a perfectly ordinary sense. The only extraordinary thing being suggested is that in God goodness exists to a degree in which it does not exist in mundane objects. But when a theist says that God is a 'person' who is in some way the 'cause' of his own existence over all time, I shall argue that, if what they say is to be logically possible, these words must be being used in somewhat analogical senses; for, if they are not (and if no other account can be given of how these words are being given unusual senses), the claims are straightforwardly logically impossible. Having explicated the analogical senses in which I believe the words are being used in certain theological sentences, I shall prove unable to give a direct or semi-direct a priori argument to show either that those sentences are logically possible or that they are logically impossible. There remains, however, the possibility of an inductive argument of the second kind discussed above, to show that they are probably logically possible, an argument from the fact (if it is a fact) that observable evidence makes it significantly more probable than not that the version of theism that includes such sentences would be true if it were logically possible. Whether there is such evidence is beyond the scope of this book; I discuss it at considerable length in the second book of this trilogy on theism, *The Existence of God*.

Metaphor

It is important to distinguish analogy, as defined in this chapter, from 'metaphor' in a natural use of that term.[9] If a word is used in an analogical sense, it is used in a new or already established sense and can be used in many different contexts in that same sense. Once an analogical sense of 'particle' is introduced, not merely photons (the

[9] I take this account of metaphor from my book *Revelation* (2nd edn, Oxford University Press, 2007), ch. 3.

'particles' of light) but electrons and protons and all other 'fundamental particles' can be said to be 'particles', and all such particles can be diffracted or interfere with each other. Hence we may say that the word is being used 'literally' in its new analogical sense. By contrast, the meaning of a metaphor varies with its context (the surrounding sentences, who said or wrote them to whom, in what cultural ambience), and a sentence that contains a word used metaphorically will express a different proposition according to the context of its utterance.

Biblical books often use metaphors. Peter is reported to have described Jesus as 'the stone which was rejected by you, the builders, which has become the cornerstone'.[10] And Jesus is reported in St John's Gospel to have described himself as 'the door of the sheep'[11] and as 'the good shepherd'.[12] But the biblical books are not claiming that the speakers were asserting that any proposition ordinarily entailed by something being a 'shepherd' or a 'rock' or a 'stone' in any literal sense is true of Jesus; in each case you need to know the context of the surrounding sentences and the context of Jewish thought, to understand what is meant by the sentence. To understand what is meant by Jesus being 'the stone which was rejected by you, the builders, which has become the cornerstone', we need to look at the context of Peter's sermon and the other biblical passages in which something similar is said. The claim is that Jesus, whose authority over the divinely constituted society of Israel was rejected by the Jewish leaders, has founded a new divinely constituted society, in the way that a stone thought unsuitable to form part of one building has become the foundation stone of a new building. Again, when Jesus said 'I am the door of the sheep', he did not mean that he was in any literal sense a door. And only in one respect was he comparing himself to a door; he was a door, in that those who sought God would find him through Jesus, just as those who seek to get into a house need to go through a door. To discover that that was what, according to St John's Gospel, Jesus meant by those words, we need to read much of that Gospel.

But, while metaphor is common in the Bible, and also in hymns or prayers, it is used much less frequently in creeds and other places where theology tries to set out some doctrine as clearly as possible. For this

[10] Acts 4:11. [11] John 10:7. [12] John 10:11.

purpose theology usually uses words in mundane or analogical senses. Yet metaphor does sometimes get even into creeds, as when Jesus Christ is said in the Nicene Creed to originate from God the Father, 'true God from true God', 'light from light'. Those who wrote the Creed, originally in Greek, certainly did not mean that Christ was φώς, 'light', in any literal sense; they were not claiming that Christ consisted of waves or particles, or anything remotely similar that operated in accord with scientific laws. Rather they used this expression because light enables one to see things, light spreads itself in all directions with apparently infinite velocity without ceasing to illuminate places already illuminated, and one candle can light another one without in any way diminishing its own illuminative power. So, the Creed is telling us, Christ enables us to 'see' ourselves and the universe as we and they really are; and the Father communicates his divine nature to the Son immediately and continually without in any way losing any of his own nature. That and no doubt much else is involved in the claim that Christ is 'light from light'; but, to understand that, we need to do more than look up φώς in a Greek dictionary. We need to know the background of Christian thought about light in biblical passages (especially Christ's claim in St John's Gospel to be 'the light of the world'[13]), the role of the sun in some pagan religions, the use of 'light' in Gnostic thought, and the beliefs of ancient science about light.[14] Knowing all that, we can see the point of the metaphor. It is that dependence on context to provide a new sense for a word that makes the use of it metaphorical and not analogical.[15] I shall, however, be arguing that, although the sentences of some creeds may use some words in metaphorical senses, there is no need to suppose that any of the creedal sentences with which I am concerned, as I have specified them in Chapter 1, do so, since we can understand them on the assumption that all their words are words used in either mundane or analogical senses.

[13] John 8:12.

[14] For the application by early Christian theologians of the metaphor of light to God and Christ, see the references in the index of G. L. Prestige, *God in Patristic Thought* (SPCK, 1956), to 'light, metaphor of.

[15] For fuller discussion of the metaphorical senses of some of the words of the Nicene Creed, see my *Revelation*, 234–6.

5

The Words of Theology:
2 Medieval and Modern Accounts

The view that theology sometimes uses ordinary words in somewhat special ways in order to describe a strange reality beyond ordinary experience is one that has occurred naturally to most of those who have thought seriously about theological language. Those who have written on the subject have not, however, always made very clear what are the 'special ways' in which the ordinary words are used. In this chapter I shall compare and contrast the views stated in the previous chapter with the views of philosophers and theologians who have written on this subject.

Medieval Accounts of Religious Language

'Now we see in a mirror dimly, but then we will see face to face. Now I know only in part; then I will know fully even as I have been known', wrote St Paul.[1] That we can know now on earth some things about what God is like, but that we can know much more in the world to come (in Heaven, or on earth after Christ's second coming), was the universal view of the New Testament writers and Christian theologians of the first four centuries. In the fourth century Basil of Caesarea put forward a more precise view, which became the common view of the Eastern Church that, although we cannot ever know the essence of God, we can now on earth know his properties, or—as they came to be called in the East, his 'energies'. Basil wrote that 'we say that we know the greatness of God, his power, his wisdom, his goodness, his providence over us, and

[1] 1 Corinthians 13:12.

the justness of his judgment';[2] and there seems to be no suggestion that there words 'goodness', 'power', and such like are being used in stretched senses. But then in the next century an unknown author who wrote under the name of 'Dionysius', purporting to be St Paul's Athenian convert of that name, claimed that God is so great that we can hardly comprehend what 'energy' such words designated. It was generally believed in the Middle Ages that Pseudo-Dionysius (as we now call him) was indeed the Dionysius whom he claimed to be, and his writings had an enormous influence on Jewish and Islamic thought, as well as on Christian thought. Pseudo-Dionysius claimed that it is 'much more appropriate' to say that God is 'invisible, infinite, ungraspable, and other things which show not what he is but what in fact he is not', since 'God is in no way like the things that have being and we have no knowledge at all of his incomprehensible and ineffable transcendence and invisibility'.[3] By such assertions he gave rise to the *via negativa*. In its extreme form this held that all that we can say about God is what he is not; positive statements such as 'God is good' or 'God is wise' have to be understood either negatively (as 'God is not evil' or 'God is not foolish') or as claiming that God is the cause of created things having that property (for example, as 'God is the cause of good created things being good'.) Yet both of these analyses fail lamentably to give an adequate account of what theists have wished to say about God. Sticks and stones are 'not evil'; but to say of God that he is 'good' is clearly to say more of him than that he is, like sticks and stones, not evil. And, in telling us that 'God is good', theists have wanted to make a claim about what God is like in himself, not merely about what he has caused. In the thirteenth century Aquinas rejected both of these analyses and claimed that the positive statements do, as they appear to do, tell us something about what God is like in himself; but that the positive predicates

[2] Basil of Caesarea, *Letter* 234.

[3] *De Caelesti Hierarchia* 2.3, in *Pseudo-Dionysius: The Complete Works*, trans. C. Liubheid (Paulist Press, 1987). There are passages in his writing that suggest that Pseudo-Dionysius himself did not hold quite such an extreme view. He wrote that 'the unnamed goodness [that is, God] is not just the cause of cohesion or life or perfection, so that it is from this or that providential gesture that it earns a name, but it actually contains everything beforehand within itself—and this in an uncomplicated and boundless manner—and it is thus by virtue of the unlimited goodness of its single all-creative Providence' (*De Divinis Nominibus* 1.7).

predicated of God are not univocal with their use when predicated of creatures, and are used with respect to God and creatures 'analogically'.[4]

Aquinas has a very powerful argument repeated by his successors against those who claimed that, when God is said to be 'wise' or 'good', we do not mean by these words in any way what we mean when we say that humans are 'wise' or 'good' (that is, against the view that those predicates are used 'equivocally'):

> A name is predicated of some being uselessly unless through that name we understand something of the being. But if names are said of God and creatures in a purely equivocal way, we understand nothing of God through those names; for the meanings of those names are known to us solely to the extent that they are said of creatures. In vain therefore would it be said or proved of God that He is a being, good, or the like.[5]

Aquinas is equally emphatic that we do not and cannot use words 'univocally' of God and creatures. His basic reason for this view is that God is a very different kind of being from his creatures. He classifies types of analogy in different places in his works in different ways, and subsequent commentators such as Cajetan have attempted to detect a uniform system of classification underlying the different remarks that he makes. I shall not attempt to present a uniform Thomist doctrine of analogy[6] but simply concern myself with the account that he gives of the analogical use of predicates attributed to God in *Summa Theologiae* (Ia.13) and *Summa contra Gentiles* (1.30–5). Aquinas holds that, when we apply a predicate to an entity of a radically different kind from those by reference to which we originally learnt to use the predicate, while (given that the predicate is not equivocal—that is, does not have a completely different sense) the property signified by the predicate, the *res significata*, is the same, the *modus significandi*, the way in which the predicate signifies the property, or, better, the way in which the property is present in the object of the type in question, is different. In that case, on Aquinas's definition, a predicate is being used 'analogically' in the two predications. He holds that there are very sharp divisions between kinds of creatures, which he calls 'genera', and he holds that the *modus significandi* of a predicate differs if the objects

[4] See Aquinas, *Summa Theologiae*, Ia.13.2. [5] *Summa contra Gentiles*, 1.33.6.

[6] For a very clear and thorough account of the development of Aquinas's view about analogy and its use in talk about God, see Roger M. White, *Talking about God* (Ashgate, 2010), ch. 4.

of which it is predicated are of different 'genera'. Different kinds of creatures, such as humans, animals, and plants, belong to different genera from each other, and so the *modus significandi* of a predicate attributed to a creature of one such kind will differ from the *modus significandi* of the same predicate attributed to a creature of a different kind. But 'God is more distant from any creature than any two creatures are from each other. Now there are some creatures so different that nothing can be said univocally of them—for example, when they differ in genus. Much less, therefore, could anything be said univocally of creatures and God.'[7] Hence, he holds, when we apply the same word to humans as we apply to God, we apply the word 'analogically' to God (that is, analogically with respect to its use when attributed to humans.)

An obvious example of how the *modus significandi* of a predicate differs when applied to objects of very different kinds—which brings out what Aquinas is getting at and one which he himself discusses in various places—is the example of knowledge in animals, humans, angels, and God. Beings of all these kinds are said to 'know' propositions. A common property is apparently attributed to beings of each kind, but there are differences in what knowledge amounts to in each kind of being. As Aquinas does not, as far as I know, give an analysis of knowledge, I shall express in my own way what is involved in that common property. The property of knowing that *p* is that property of which there are both human and animal paradigm examples, such that necessarily, if someone knows that *p*, *p* is true, they believe that *p*, they have good evidence for *p*, and they believe that *p* on the basis of that good evidence. All this, I suggest, is involved in knowledge, whether the

[7] *Summa Theologiae*, Ia.13.5. (All my quotations of translations of *Summa Theologiae* are taken from the edition published by Blackfriars, 1964–81.) Aquinas holds that not merely is God not in the same genus as any creature, but that he is not in any genus. For Aquinas, following Aristotle, the genus of a substance is the most general kind of thing that it is (the kind being defined by the possession of certain properties), and a species is the more detailed kind of thing (also defined by properties) that it is. So for these thinkers, although not for a modern biologist, the species of an individual oak tree is that of a tree, and its genus that of a plant. But, Aquinas claimed, there is no kind of thing that God is. Strictly speaking, his essence is not having certain properties, some of which other things have and some of which they do not have, but his essence is simply *suum esse*, 'his own being'. (See *Summa Theologiae*, Ia.3.4.) It seems as if he is saying that God is in some way 'pure existence', which looks incoherent—a thing can exist only by being a certain kind of thing. I discuss briefly in Chapter 13 how this claim of Aquinas can be interpreted in a way that avoids evident incoherence.

knower is an animal, a human, an angel, or God. (In the case of God, of course, the evidence is infallible evidence.) Although not all philosophers (including Aquinas himself) would accept this account of the nature of knowledge, it would—I suggest—be fairly generally agreed that something along these lines is what knowledge consists in. However, there are differences that Aquinas discusses between the different kinds of being in respect of what their knowledge consists in, and he discusses the differences between human knowledge and God's knowledge in (among other places) *Summa Theologiae*, Ia.14. Knowledge in humans is what Aquinas calls a 'habitual capacity'; we know something if we can bring it to mind, when it is relevant to our concerns. We know many things about which we are not currently thinking. Yet in God there is no potentiality—no ability to develop, to realize as yet unrealized qualities; God's knowledge is ever before his mind.[8] Among other differences between human knowledge and God's knowledge too obvious for Aquinas to discuss in detail are that human knowledge is fallible; we might not have known what we do know, but what God knows he could not not have known. Also, humans often come to know things by inference from other things; whereas, since all things that God knows are obvious to him, he does not need to make any inferences from the observed to the unobserved in order to gain knowledge. Among the other differences between human knowledge and God's knowledge that Aquinas does discuss in detail are that God, unlike humans, 'knows future contingent events' and his knowledge is unchangeable. I shall question these particular claims about God's knowledge in Chapter 10. Aquinas claims that these differences have the consequence that knowledge is present in God 'to a superior degree' (*eminentiori modo*) than in humans. And generally, he claims, the other properties that both God and humans have, such as power and goodness, are also present in God 'to a superior degree' than in humans.

However, these differences do not have the consequence that 'knows' is used in different senses (in the sense of 'sense' delineated in Chapter 2) in 'God knows that *p*' and 'Socrates knows that *p*'—any more than the fact that when I 'weigh 10 stone', this is because my body is made of 10 stone of flesh and bone, and when my filing cabinet 'weighs 10 stone', this is because my filing cabinet is made of 10 stone of steel, means that

[8] *Summa Theologiae*, Ia.14.1.ad.1.

'weighs 10 stone' has a different sense in the two sentences. By the criteria that I put forward in Chapter 2, the sense of a word (or longer part of a sentence) is determined by the criteria that determine whether or not it applies to some object, and by its mini-entailments. So the sense of 'knows that *p*' is determined by the criteria that determine whether someone 'knows that *p*', and what is mini-entailed by it. Since there are the same criteria for whether some object 'weighs 10 stone', whether the object is me or my filing cabinet—for example, that it affects weighing machines in the same way; and since 'O weighs 10 stone' has many common mini-entailments for all 'O', the sense is surely the same. Likewise since there are the same criteria for whether someone 'knows that *p*', whoever that someone is, and 'S knows that *p*' has many common mini-entailments, whoever S is, the sense of 'knows that *p*' is the same in both cases. Of course, 'God knows that *p*' mini-entails that God has certain properties—for example, knowing *p* infallibly, whereas 'Socrates knows that *p*' does not entail that Socrates has these properties. But that is not because 'know' has a different sense in the two sentences, but because the attribution of the one property to God has consequences that its attribution to Socrates does not.

Aquinas acknowledges that the *res significata* (the property signified) is the same in 'God knows that *p*' and in 'Socrates knows that *p*'. And since for Aquinas 'univocally' means 'in the same sense' (*significatio*), then in the sense of 'sense' that I delineated in Chapter 2 and believe to be the modern sense, a word is being used univocally if it designates the same property, and so on Aquinas's account words such as 'good', 'powerful', and so on are being used univocally in our sense of 'univocal', of God, and of humans. While Aquinas draws our attention to the vast differences between the wisdom of God and the wisdom of Socrates, the power of God and the power of Stalin, and so on, he does not seem to me to distinguish between these differences and the need to use words in senses other than their mundane sense in order to expound them. And the sense of 'univocal' and so of 'sense' that I am using is not just a modern sense. Duns Scotus also uses these words in just the same sense as I do, and makes the comment, probably with respect to Aquinas, that 'those masters who deny univocity with their lips really presuppose it'.[9]

[9] *Reportata Parisiensia*, 1.3.1., no. 7, cited in F. Copleston, *A History of Philosophy*, ii (Burns and Oates, 1964), 505.

Duns Scotus himself explicitly taught that predicates such as 'good' and 'wise', and above all 'exists', are applied univocally to God and man:

> Take, for example, the formal notion of 'wisdom' or 'intellect' or 'will'. Such a notion is considered first of all simply in itself and absolutely. Because this notion includes formally no imperfection nor limitation, the imperfections associated with it in creatures are removed. Retaining this same notion of 'wisdom' and 'will', we attribute these to God—but in a most perfect degree. Consequently every inquiry regarding God is based upon the supposition that the intellect has the same univocal concept which is obtained from creatures.[10]

The meaning of words such as 'good' and 'wise', Scotus held, is learnt by seeing them applied in mundane situations. The only difference when we use them in theology is that we combine them in unusual ways or suppose the properties denoted to exist in higher degrees than in the mundane objects to which we originally applied the words:

> Creatures which impress their own proper concepts on the intellect can also impress the concepts of the transcendentals which are common to themselves and to God. Then the intellect in virtue of its own power can make use of many such concepts simultaneously, in order to conceive at one time those things of which these are the concepts. For instance it can use the concept of 'good', the concept of 'highest', the concept of 'act', to conceive the 'highest good which is pure act' . . . The imagination is able to use the concepts of different things perceptible to the senses and thus imagine a composite of these different elements, as is apparent, for instance, when we imagine a gold mountain.[11]

So we have clearly in Scotus the first view of theological language, that it uses ordinary words in mundane senses but often in different conjuncts,

[10] *Opus Oxoniense*, I.dist.3.q.1; trans. Allan Wolter, in Duns Scotus, *Philosophical Writings*, 2nd edn (Hackett, 1987), 20. Scotus also writes that he designates 'that concept univocal which possesses sufficient unity in itself so that to affirm and deny it of one and the same thing would be a contradiction' (*Opus Oxoniense*, trans. Wolter, 20). In other words the word 'P' is univocal (expresses the same concept in both sentences) if '*a* is P' contradicts '*a* is not-P'. Since 'God is not wise' contradicts 'God is wise', 'wise' expresses the same concept in both sentences. Whereas 'God is not indifferent' does not necessarily contradict 'God is indifferent', for in one sentence 'indifferent' may be used in its old sense of 'impartial' and in the other sentence in its modern sense of 'not caring'. For Ockham's denial of the apparent contradiction between the views of Aquinas and Scotus, and his claim that, in one sense of 'univocal' and one sense of 'analogical', the univocal could be analogical, see n. 12.

[11] Duns Scotus, *Opus Oxeniense*, I, dist. III.q.i, trans. Allan Wolter, in Duns Scotus, *Philosophical Writings*, 28–9. I have replaced Wolter's translation of the Latin *species* as 'species' by 'concept'. A 'transcendental' is a predicate that can be applied to substances of different genera.

which I stated in the preceding chapter (and indeed the very example of a gold mountain, used by Hume (see Chapter 2)); the later scholastic philosopher William of Ockham held similar views.[12] Not everyone will agree with my interpretation of Aquinas. Nothing of philosophical substance turns on whether my account of Aquinas's doctrine is correct. Nevertheless, I thought it right to treat of him at length and set his doctrine within the context of my treatment of theological language, because of the wide influence exerted by his discussion of the topic. But, if my interpretation of Aquinas is correct, the three most important later medieval philosophers all held that predicates ascribed to God and to creatures, and, in general, words used inside and outside theology were used in the same mundane senses. Their arguments for this were that otherwise we could not understand, let alone have evidence for, the claims of theology. But this argument shows only that, if theology introduces new senses for words, it must show what those senses are by giving semantic and syntactic rules (with the help of ordinary words) for their use, not that theology cannot introduce new senses for words.

Modern Accounts of Religious Language

So much for the scholastics. The twentieth century shared their great interest in religious language. The continental theologians Bultmann, Tillich, Barth, and so on have had much to say about it.[13] But precise accounts of exactly how words used in theology are similar to or different from words used outside theology are hard to find in their works. It is to writers in the 'analytic' tradition that we must look for more careful statements. The Logical Positivists and other writers in that tradition in the 1930s and 1940s tended to assume without argument that words used in theology meant precisely what they did in other contexts. The 1950s,

[12] Ockham distinguishes three senses of 'univocal' (see his *Reportatio*, III. q.8, trans. in P. Boehner (ed.), *Ockham: Philosophical Writings* (Nelson, 1957), 106–13). In the first sense a word is 'univocal' if it denotes a concept that applies to things that are perfectly alike in all essentials—that is, if it applies to members of the same 'species'. In the second sense a word is 'univocal' if it denotes a concept that applies to things similar in some essential respects and dissimilar in others—that is, to members of the same 'genus'. In the third sense a word is 'univocal' if it designates a concept common to many things. In this sense of 'analogical', Ockham writes, 'every concept which applies to God and to creatures is univocal to them'.

[13] See John Macquarrie, *God-Talk* (SCM Press, 1967), ch. 2, for a summary of the views of these three theologians about religious language.

however, saw some moves away from this position. One such move was in the direction of attitude theories, that certain kinds of sentence and so the words that they contain, which outside theology are used to describe the world, are used inside theology only to commend values or express attitudes. I shall discuss attitude theories in Chapter 6. However, a few writers in the early years of 'analytic' philosophy of religion accepted that at any rate the creedal sentences of theology do have to some extent a fact-stating role, and they sought to elucidate to some extent how theological words acquire their meaning.

Ian Ramsey stressed that in theology we use different 'models' to get across the meaning of theological claims.[14] Thus in 'God is the cause of the Universe', or 'God is wise', or 'God is good', we use a model of an ordinary human creating a work of art, or of a good or wise human person. But we qualify these models by saying that God is the 'first' cause, 'infinitely' wise, and 'infinitely' good. To make these qualifications is not just to place God further along a scale of causes going backward in time, or of people wiser or better than any human, but develops the model 'in a certain direction'.[15] When a theologian presents us with such examples, we may for a little while not see what he is getting at, and then 'the penny drops', a 'disclosure', or 'discernment' occurs.[16] This account of religious language is, like the accounts of continental theologians, a very vague one. But it seems to me that in Ramsey's account there is implicit an advance from the doctrine of Scotus and Ockham that the words of theology are ordinary words used in mundane senses. I take from Ramsey the points that 'we must expect religious language to be appropriately odd, and to have a distinctive logical behaviour',[17] and that 'religious discourse deals in a profusion of models, and much of the paradox in religious discourse arises because discourse which has been developed from one model infiltrates into, and mixes with, discourse developed from another'.[18]

A more careful and systematic account of religious language was given by I. M. Crombie in his paper 'The Possibility of Theological

[14] See, among other works, Ian Ramsey, *Religious Language; Models and Mystery* (SCM Press, 1964), and *Christian Discourse: Some Logical Explorations* (Oxford University Press, 1965). This last, a short work, is in some ways clearer and more satisfactory than the others.

[15] See Ramsey, *Religious Language*, 71.

[16] See Ramsey, *Religious Language*, ch. 2.

[17] Ramsey, *Religious Language*, 49.

[18] Ramsey, *Christian Discourse*, 18–19.

Statements'.[19] In order to show what such claims as 'God loves us' mean, we have to clarify about whom we are talking (fix the reference of 'God') and clarify what we are saying about him (for example, say what 'loves us' means). We cannot fix the reference of God by pointing to him literally or giving a description, since the 'descriptions which are sometimes offered as uniquely characterizing Him ("the first cause", "the necessary being") are such that nobody can say what it would be like to conform to one of them'.[20] But we can, Crombie affirms, get some sense of what a 'first cause' is by reflecting on the whole universe and 'parables' of people making things. And we can get some idea of what God is supposed to be like by considering the attributes of people which cannot be analysed in purely materialistic terms—'loving, feeling, hoping, even seeing are obvious examples'. Considering these characteristics which 'have a relative independence of space' we get 'the notion of a being independent of space', 'a spirit', or rather 'not a conception, but the hint of a possibility of something we cannot conceive, but which lies outside the range of possible conception *in a determinate direction*'.[21] Using the word 'spirit' as anything other than an abstract noun involves 'the deliberate commission of a category mistake under the pressure of convictions which require us to depart from normal language-practice in this way'.[22]

In all cases, Crombie claims, the predicates such as 'loves' are used of God, not because they fit exactly but because they are the nearest words we have for what we want to say. For example, we use the word 'love' because we 'believe in some kind of resemblance or analogy between, say, human love and divine love'.[23] In using such words of God, we 'affirm a parable'. I take from this account the claim expounded in Chapter 4 (to be substantiated in analyses of certain theological claims later in this book) that theology makes 'category mistakes—that is, introduces new syntactic rules for the use of words; as well as the evident point that,in

[19] In I. M. Crombie, 'The Possibility of Theological Statements, in B. Mitchell (ed.), *Faith and Logic* (George Allen and Unwin, 1957), 31–83.

[20] Crombie, 'Possibility, 43.

[21] Crombie, 'Possibility', 43, 57–8 (emphasis in original). This idea of religious language telling us about something that lies 'in a determinate direction' (Crombie) and 'in a certain direction' (Ramsey) is similar to Aquinas's idea that religious language tells us that certain predicates such as 'wise' apply to God *eminentiori modo*, that is 'to a superior degree' to that in which they apply to humans.

[22] Crombie, 'Possibility', 60.

[23] Crombie, 'Possibility', 71.

affirming of God predicates such as 'loving', we are affirming the existence in God of a property similar to the property so named in ordinary language—for example, love.

Analytic philosophy of religion in its beginning in the 1950s was concerned with whether religious utterances were 'meaningful'—that is, had any meaning at all, and such writings as those of Ramsey and Crombie sought to answer that question with a positive 'Yes', by producing their short answers to how such utterances get their meaning. But thereafter analytic philosophy largely took it for granted that religious utterances are meaningful, and—while sometimes mentioning that words used to describe God are used 'analogically'—nevertheless in practice tended to assume that such words are used in senses much like their mundane senses, and went on to investigate in more detail what would constitute God being 'perfectly good' or 'creator of the universe' and whether it is coherent to suppose that such sentences are true.

One later writer who did consider at a little length the general question of how predicates attributing properties to God acquire their meaning, and produced a much sharper answer to it than did either Ramsey or Crombie, was William Alston. He gave a 'functionalist' account of this language. A functionalist theory of mind holds that the 'psychological' properties of a person (such as belief, desire, intention, and thought) are the properties they are in virtue of their place in a network of such properties possessed by that person, which leads to a certain kind of behaviour. To quote Alston:

> Functionalism, as an improved version of behaviourism, seeks to preserve the basic insight that the function of the psyche is the guidance of behavior, while avoiding the simple minded idea that each psychological state determines behavioral dispositions all by itself. It tries to bring this off by thinking of a belief, e.g. as indeed related to potential behavior, but only through the mediation of other psychological states. A belief that it is raining is, *inter alia*, a disposition to carry an umbrella if one is going outside, provided one has such-and-such other beliefs, desires, aversions, attitudes, etc. The concept of a belief is (in part) the concept of a certain way in which a state combines with other states and processes to determine behavior . . . A belief has the function of combining with other beliefs to inferentially produce still other beliefs, the function of combining with desires and aversions and other beliefs to produce other desires and aversions (as when my belief that I can't get a wanted object without earning money gives rise to a derivative desire to earn money), and the function of combining with desires to

produce affective reactions (as when my belief that I have not been accepted to medical school combines with my desire to go to medical school to produce disappointment), as well as the function of combining with other psychological states to influence behavior. Clearly a complete analysis of a psychological concept along functionalist lines would be an enormously complicated affair and perhaps beyond human power to achieve.[24]

Alston allows that there may be more to feelings and sensations than their functional role, 'since that leaves out their distinctive "qualitative" or "phenomenal" character'; but he claims that 'it will be enough if our concept of a given type of psychological state is *in part* the concept of a functional role'.[25]

Now any particular network of beliefs, desires, and so on can be instantiated in many different states of physical or non-physical objects; a computer could have the same network as an animal; a given functional property or state 'can have different, even radically different, realizations'.[26] So Alston claims:

> The application to theological predication should be obvious in its main lines. The same functional concept of knowledge that *p*, or of purpose to bring about R, could be applicable to God and to man, even though the realization of that function is radically different, even though what it is to know that *p* is radically different in the two cases. We can form no notion of what it is like to be God, to know or to purpose as God does, while still thinking of God in terms that we understand because they apply to us.[27]

God does not have a body, but his purposes are executed by him bringing about states of the world directly. So, although some features of human mental states (for example, forming intentions after deliberation about what to do) would not hold for divine mental states, 'a functional approach to psychological concepts makes it possible to start with human psychological concepts and create psychological concepts that literally apply to God'.[28] The words 'purpose', 'belief', and so on may not apply to God in their ordinary senses, but, if we think of the world as that through which God acts in the way that we act through our bodies, we can easily replace the ordinary senses of these words by fully intelligible

[24] William P. Alston, 'Functionalism and Theological Language', *American Philosophical Quarterly*, 22 (1985), 221–30. See pp. 223–4.
[25] Alston, 'Functionalism', 224 (emphasis in original).
[26] Alston, 'Functionalism', 225.
[27] Alston, 'Functionalism', 225.
[28] Alston, 'Functionalism',. 229.

senses that apply to God; God's 'beliefs' are states that, together with his 'desires' and other psychological states and given God's limitless powers, make the sort of difference to the world that our psychological states make to our bodies, given our powers.

Interestingly, Kant had produced much the same kind of theory of religious language, long before 'functionalism' was discussed. Kant held that theistic religion involves postulating a 'noumenal' being, God, whose relation to the world is of exactly the same kind as that of humans to the effects of their actions. 'Such a cognition is one of analogy and does not signify (as is commonly understood) an imperfect similarity of two things, but a perfect similarity of relations between two quite different things.'[29] The pure categories such as 'cause' are applicable equally to the realm of phenomena (the experienceable physical and mental worlds) and to the realm of noumena (the entities that underlie the phenomena). In postulating God as 'living' or 'wise', we are postulating that he is a being who causes—with his limitless powers—the kind of events that living humans cause with their finite powers. And similarly, Kant claimed, for other predicates designating properties that we attribute to God; we mean by God having those properties no more than that he produces certain kinds of observable effect.

> Suppose I attribute to the Supreme Being understanding, for instance; I have no concept of understanding other than my own, one which must receive its intuitions by the senses and which is occupied in bringing them under rules of the unity of consciousness . . . But if I separate understanding from sensitivity to obtain a pure understanding, then nothing remains but the mere form of thinking without intuition, by which form I can know nothing definite and consequently no object . . . And the very same difficulties arise if we attribute a will to the Supreme Being.[30]

Alston's 'functionalist' account emphasizes that all the divine mental properties (God's knowledge, wisdom, goodness, and so on) interact for God to produce effects, and thus we cannot give such a simple account of God's 'wisdom' or whatever in terms of the effects that it would have by itself. But otherwise Kant's account is the same as Alston's, and not

[29] I. Kant, *Prolegomena to any Future Metaphysics* (originally published 1783), trans. L. W. Beck (Bobbs-Merrill, 1950), sect. 58.

[30] Kant, *Prolegomena*, sect. 57. See White, *Talking about God*, ch. 5, for his explication of Kant's account of analogy.

dissimilar from an account that Aquinas rejected—that God's goodness, and so on, consists in God being the cause of good things. I do not find any of these accounts plausible as an account of the normal use of religious language for the reason that Aquinas gave—that positive predicates ('good', 'wise', and so on) are used to tell us something about what God is like in himself: 'thus God does not count as good because he causes goodness, but rather goodness flows from him because he is good.'[31] As far as Alston's or Kant's account go, God could be a non-conscious computer.

I argued earlier, however, that Aquinas's account of religious language in effect claims that words are used of God and humans univocally. I think that in this he is right with respect to those divine predicates that I shall discuss in Part II, but that this account is not correct for the divine predicates that I shall discuss in Part III, where we need the account of analogy that I provided in Chapter 4 and find adumbrated in the writings of Ramsey and Crombie.

[31] Aquinas, *Summa Theologiae*, Ia.13.2.

6

Attitude Theories

In the previous two chapters I have analysed two different accounts of how the words of theology acquire their senses—either by retaining their mundane senses or by being given new analogical senses in a way that I have described. How far either of these accounts is correct must be judged by its ability to give a plausible account of what the theist wishes to say by means of creedal sentences. In Parts II and III of this book I hope to give such an account on the assumption that the words of theology get their meaning in one or other of the stated ways. However, I also hope that the previous two chapters have made it initially plausible to suppose that the words of theology are meaningful. In consequence, as we saw earlier, creedal sentences, being well-formed indicative sentences containing these words, will be meaningful. Normally (although not always) meaningful indicative sentences express propositions, and—when asserted—make claims about how things are. Creedal sentences look as if they are doing just that, making claims about a reality beyond the world of sense that explains the ordinary things around us.

However, a number of writers during the middle years of the twentieth century denied that 'religious' utterances, and in particular creedal sentences, express propositions. For them religious utterances express intentions to live in certain ways, or express attitudes of approval for certain patterns of life, or do something else other than stating how things are. This 'anti-realist' view holds that in creedal sentences the sentence-form does not have its normal meaning, but that of some other sentence-form. In this chapter I will examine this view.

A very clear and uncompromising presentation of this view was given by R. B. Braithwaite.[1] He claimed that 'a religious assertion is the

[1] R. B. Braithwaite, *An Empiricist's View of the Nature of Religious Belief* (Cambridge University Press, 1955). Reprinted, among other places, in B. Mitchell (ed.), *The Philosophy*

assertion of an intention to carry out a certain behaviour policy, subsumable under a sufficiently general principle to be a moral one, together with the implicit or explicit statement, but not the assertion, of certain stories'.[2] The stories about the life, death, and resurrection of Jesus Christ, or the creation of the world, or the life of the Buddha, understood outside a religious context literally as propositions, may or may not be believed to be true. The important thing, however, is that the stories show examples of a certain kind of behaviour; and, in 'affirming' the network of stories that are associated with a religious system taken together in a religious context, what the religious person is doing is committing himself to that kind of behaviour. We find out what kind of behaviour is associated with the stories of religion by

> asking [the religious person] questions and by seeing how he behaves . . . I myself take the typical meaning of the body of Christian assertions as being given by their proclaiming intentions to follow an agapeistic way of life, and for a description of this way of life—a description in general and metaphorical terms, but an empirical description nevertheless—I should quote most of the thirteenth chapter of 1 Corinthians.[3]

So, to simplify crudely but not, I think, unfairly, the meaning of 'there is an omnipotent, omniscient spirit who cares for humans' is just 'I commit myself to show great consideration for all humans'. A religious 'believer' is, according to Braithwaite, misleadingly so called; 'neither the assertion of the intention [to carry out a certain behaviour policy] nor the reference to the stories includes belief in its ordinary senses'.[4]

Now it may well be that someone who utters a creedal sentence thereby commits himself to pursuing a certain course of behaviour. But, even if this were so (and all that I argue in this book suggests that it is not so), that would not show that that is *all* that is done by uttering a creedal sentence. And on the surface Braithwaite's account seems glaringly false. It does look very obvious that creedal sentences express propositions, and—when asserted—make claims about how the world is. Non-Christians may express intentions to pursue much the same course

of Religion (Oxford University Press, 1971), 72–91. My page references are to the latter volume.

[2] Braithwaite, *An Empiricist's View*, 89.
[3] Braithwaite, *An Empiricist's View*, 81–2.
[4] Braithwaite, *An Empiricist's View*, 89.

of behaviour as Christians, and they might illustrate the kind of behaviour they intend to pursue by reference to the Christian stories (for example, 'to behave towards foreigners as the "Good Samaritan" did towards Jews'). But they would not express those intentions by means of Christian creedal sentences (for example, 'There is a God who became incarnate in Christ'). Nor would they be called Christian 'believers' just because they affirmed those intentions. When people 'lose their faith', they do not necessarily lose their intention of following a certain behaviour policy. But they cease to assert creedal sentences (unless they utter them in order to deceive) because they come to regard the metaphysical claims that those sentences seem to make, as false.[5]

Braithwaite came to his implausible account of the meaning of creedal sentences because of his prior commitment to the philosophical theory of verificationism, which, as I mentioned in Chapter 2, had a powerful influence in the middle years of the twentieth century. Creedal sentences could not, he claimed, express propositions about particular empirical facts, or scientific hypotheses, or propositions of logic and mathematics. We can see that, he claimed, because we can see that creedal sentences are not open to verification (or falsification) in the same way. Braithwaite seems to assume, though he does not state, that those three kinds of propositions are the only kinds of propositions that there are. So we have to look around for some sort of sentences to which creedal sentences are akin; and, he claims, we find that moral sentences are akin to creedal sentences. Moral sentences are, he holds, also not 'verifiable' (or falsifiable), but they have a use—in guiding conduct. I argued briefly in Chapter 2, along lines that would be agreed by most contemporary philosophers, that sentences do not need to be verifiable in order to express propositions and I have argued elsewhere[6]

[5] It may be claimed that, although the non-Christian could affirm his commitment to much the same behaviour as a Christian (e.g. in respect of his family, his neighbours, and society as a whole), he could not affirm his commitment to exactly the same behaviour as a Christian. For a Christian is committed to certain peculiarly religious behaviour—e.g. saying prayers. But it is certainly logically possible for a non-Christian to express his intention to say prayers—that is, to utter from time to time the words that Christians utter when they pray. Why it would be odd for a non-Christian to do this is that the activity has no point unless she believes (or at least believes that there is some not insignificant probability) that there is a God who hears prayers. Creedal assertions justify this activity, by claiming that there is such a God.

[6] See my book *The Existence of God* (2nd edn, Oxford University Press, 2004).

that creedal propositions are at least in a weak sense 'verifiable' in the way that scientific hypotheses are.

A number of other writers of the middle years of the twentieth century gave in vaguer and more obscure language the kind of account of religious language that Braithwaite gave so sharply and clearly. Similar objections tell against them all. Asserted creedal sentences do not *merely* affirm intentions. Nor do they merely express emotions or hopes. And clearly one thing that they do is to express claims about how things are. Most of these writers do not require separate discussion. However, one group of writers who in a way opposed the view that creedal sentences make factual claims does require more lengthy treatment. This is the group of those who expounded a view sometimes called 'Wittgensteinian fideism', of whom the best known is perhaps D. Z. Phillips.

Wittgenstein wrote very little explicitly about religion, but his writing about language-games in *Philosophical Investigations* gave rise to the account of religious language given by Phillips and others. A language-game is a certain kind of discourse. A language-game may be a very simple kind of language, such as a language in which there are a few simple commands that are given and obeyed. Or it may be a segment of a complicated language, as, for example, 'giving orders and obeying them; describing the appearance of an object, or giving its measurements; constructing an object from a description (a drawing); reporting an event; speculating about an event; forming and testing a hypothesis; presenting the results of an experiment in talks and diagrams; making up a story, and reading it; play-acting . . . '.[7] To study a language-game is to study how and when the different sentences of a kind of discourse are uttered (in which circumstances, in response to which other sentences). Thus to study the scientific language-game of 'forming and testing a hypothesis' is to study when scientists construct hypotheses, when they reject them, when they judge them confirmed, which experiments they do to test them, and so on. Wittgenstein lays down no rules for what constitutes one language-game as opposed to several such games, nor

[7] L. Wittgenstein, *Philosophical Investigations*, trans. G. E. M. Anscombe (Basil Blackwell, 1953), I.23. In his earlier *Blue Book* (*The Blue and Brown Books* (Basil Blackwell, 1969), 17), Wittgenstein wrote that 'the study of language-games is the study of primitive forms of language or primitive language'. In the *Investigations* there is the wider understanding of 'language-games' described above. See Anthony Kenny, *Wittgenstein* (Penguin Press, 1973), ch. 9, for discussion of Wittgenstein's treatment of language-games.

does he claim that there are no logical connections between language-games. And quite obviously there are such connections, if we take the examples of language-games given in Wittgenstein's list. Obviously the 'report' of an event can count crucially against the truth of a scientific 'hypothesis'.

However, writers such as D. Z. Phillips have written of the 'religious language-game' as an activity in which religious people indulge that has no logical connections with any other language-game; assertions of the religious language-game do not, in their view, entail assertions of any other language-game, and conversely. The religious language-game certainly *presupposes* the occurrence of certain mundane events, such as birth and death describable in non-religious terms, in which religion finds a meaning.[8] But it does not predict such events; nor does their occurrence entail its truth (nor does any weaker relation such as 'making probable' hold between assertions of the two disciplines). To understand what religious utterances such as creedal sentences mean, one must study when and where they are uttered and the point of uttering them. Other writers, Phillips writes, 'have assumed too readily that words such as "existence", "love", "will", are used in the same way of God as they are used of human beings, animate and inanimate objects'.[9] But, he claims, 'the criteria of the meaningfulness of religious concepts are to be found within religion itself'.[10] The language-game of religion, like that of science or history, is played. What can be said—that God loves this and hates that, hears these prayers and forgives those sins—cannot be determined by arguments that use the criteria of other disciplines. Religious discourse has its own criteria, which determine what can be said. History and science have their own criteria of truth; so too does religion. Disciplines cannot be judged from without; they have their own standards within.

From here Phillips proceeds to give his own account of the meaning of religious sentences. A few quotations from his writings will give the flavour of his account of theological language. 'To know how to use [religious] language is to know God.' Prayer is, however, 'not a conversation'.[11] Like

[8] D. Z. Phillips brings this out in his reply to critics in 'Religious Beliefs and Language Games', *Ratio*, 12 (1970), 26–46, repr. in Mitchell (ed.), *The Philosophy of Religion*, 121–42.

[9] D. Z. Phillips, *The Concept of Prayer* (Routledge and Kegan Paul, 1965), 8.

[10] Phillips, *Concept of Prayer*, 10.

[11] Phillips, *Concept of Prayer*, 50.

the will of the dead, the will of God cannot be 'bargained with'. One thanks God—but not for doing this rather than that. One thanks him, as one would not thank human benefactors, for good and evil. God's being good does not mean that things are going to happen one way rather than another.

> When deep religious believers pray *for* something, they are not so much asking God to bring this about, but in a way telling him of the strength of their desires. In prayers of confession and in prayers of petition, the believer is trying to find a meaning and a hope that will deliver him from the elements in his life which threaten to destroy it.[12]

To think of prayer as an attempt at influencing the divine will is 'superstition'. 'Eternal life for the believer is participation in the life of God,' not survival after death.[13] 'In learning by contemplation, attention, renunciation, what forgiving, thanking, loving etc. mean in these contexts, the believer is participating in the reality of God; *this is what we mean by God's reality*.'[14] 'The love of God is manifested in the believer's relationship to people and things. In this sense he can be said to have a love of the world. To see the world as God's world, would, primarily, be to possess this love. To say that God created the world would not be to put forward a theory, hypothesis, or explanation of the world.'[15] (A footnote explains that Phillips wrote 'primarily' 'because of the possibility of other responses to seeing the world as God's, e.g. rebellion, fear, or aspiration'.)

Although Phillips, like Wittgenstein, would have regarded any brief summary of his views as simplistic, it is, I think, nevertheless fair to extrapolate from the above quotations the following account of creedal sentences. The creedal sentences of theology do not make claims that could in any way conflict with claims of any other discipline. To suppose otherwise is 'superstition'. Theology makes no claims about the past history or the future experiences of any individual human or of the whole human race; and no claims about any suprasensible reality that explains the observable world. Creedal sentences concern rather the right

[12] Phillips, *Concept of Prayer*, 121.
[13] D. Z. Philips, *Death and Immortality* (MacMillan, 1970), 54–5.
[14] Philips, *Death and Immortality*, 55 (emphasis in original).
[15] D. Z. Phillips, 'From World to God?', *Proceedings of the Aristotelian Society*, suppl. vol. 41 (1967), 133–52.

moral or emotional attitude that we should have towards the world, and the ways in which it would be good to behave.

Phillips's account of religious language is subtle and coherently developed, reflecting Wittgenstein's immense sensitivity to the different uses of language. It seems, however, to me to be in essence plainly false as an account of what the vast majority of normal users of religious language during the past two millennia have meant by the words and sentences that they have uttered. The vast majority of those who have prayed petitionary prayers have hoped that their prayer would make a difference to the way things happen. They would admit, of course, that God in his wisdom might choose not to grant the prayer, but they have hoped that he would grant it, in the way in which a ruler might grant a petition. (Jesus himself in his parable of the unjust judge likened petitionary prayer to God to petitionary prayer to an earthly ruler.[16]) The vast majority of those who have expressed in the Nicene Creed their belief in 'the Resurrection of the Dead, and the Life of the World to come' have believed in survival after death. For they have been moulded in this thought by many New Testament passages and especially by St Paul's explicit affirmation of this in 1 Corinthians 15. They have supposed that they would meet their loved ones in a future world. And, to turn to an expression of more immediate concern to us, the vast majority of those who have used religious language have certainly treated the affirmation that God created the world as the confident propounding of a hypothesis explaining its existence. This can be seen by the fact that they have abandoned their faith if they have come to believe that 'matter alone exists' or 'there is nothing beyond the Universe and the people in it' or some such claim. They have thought of God as a person who can always intervene in history to make a difference to things, though he may choose not to. This is the clear and unambiguous picture of God in the Old and New Testaments, and Jews and Christians have formed their idea of God by continual study of the Scriptures.

If Phillips was right in his account of religious language, it would be immensely puzzling why religious people use the words that they do. Why affirm their belief in God as 'loving', 'creator', 'saviour', and so on, if these words do not have a meaning in any way similar to their normal

[16] Luke 18:1–8.

meaning? Certainly God's love may not be quite like human love, and theists may use the word 'love' only because it is the word nearest in meaning to the word that they would like to use but have not got. But, if God's 'love' is not in any way similar to the love of a person, shown by care for well-being, readiness to forgive faults, and so on, why talk of 'love'? Phillips's account of religious language might serve as a useful reinterpretation of the sentences traditionally uttered by theists, for someone who for some reason wished to continue to utter them but did not wish to utter them with their normal meaning. But, as an account of the meaning of the sentences uttered by the vast majority of theists down the past two millennia, Phillips's account is false.

I conclude that attitude theories of creedal sentences are mistaken. Creedal sentences, do, as they appear to, express propositions about a suprasensible reality, although they may use words in stretched senses in order to do so. The rest of the book will be concerned with whether the propositions expressed by typical creedal sentences are coherent propositi*o*ns.

PART II

A Contingent God

7

An Omnipresent Spirit

The Task of Part II

I concluded Part I by claiming that creedal sentences express propositions about a suprasensible reality. In earlier chapters I analysed what it is for a word to be used in a mundane sense, or in a sense analogical with its mundane sense, and showed how we can show that some sentence (which uses words in one or other of these ways) expresses a logically possible proposition. In Chapters 7–11 of this part of the book I shall consider what it means to say that 'there exists at a time *t* an omnipresent spirit, free, creator of the universe, omnipotent, omniscient, perfectly good, and a source of moral obligation', and whether this sentence expresses a logically possible proposition. I shall then go on to consider in Chapter 12 what it means to say that such a being exists 'eternally' and whether that expresses a logically possible proposition. I shall conclude that, when the words in these sentences are understood either in their mundane senses, or in a way defined by other words used in mundane senses, the propositions so expressed are logically possible ones—given that the technical terms 'omnipotent' and 'omniscient' are defined in ways more restricted than their etymology might suggest, and given that 'eternally' is understood in a certain sense. Since, I shall be claiming, all the predicates used in these sentences are informative designators designating observable or experienceable properties or defined in terms of such properties, if the proposition expressed thereby is logically possible, it is metaphysically possible (that is, coherent). And if the sentence refers to 'possible' (or 'necessary' or 'impossible') events (including actions) or substances, then, since any metaphysically possible (or whatever) event or substance is logically possible (or whatever) and conversely, the logically/metaphysically possible distinction is not relevant; and I shall refer to such possibilities (or whatever) as 'logical' ones. The coherence of

the propositions expressed by such sentences is a matter of their logical possibility.

I shall proceed to show that the proposition referred to above is logically possible by taking in each chapter one or two of the properties referred to and considering whether it is logically possible that there exists a being with those properties as well as the properties discussed in preceding chapters. In the first chapter of this part, Chapter 7, I consider whether it is logically possible that there exists a spirit: that is, a person without a body who exists everywhere—that is, is omnipresent. Then in Chapter 8 I consider whether it is logically possible that there exists an omnipresent spirit who has free will and is the creator of the world. Then in Chapter 9 I consider whether it is logically possible that there is a person of the kind analysed in Chapter 8 who is also omnipotent. And so on.

I argue for the logical possibility of these propositions by attempting to construct positive proofs of that possibility, and by attempting to refute arguments purporting to show that the propositions are logically impossible. I attempt the former task by a priori methods, for the most part by what I called the 'direct method', as analysed in Chapter 2. I attempt to show some proposition to be logically possible by deducing it from a fairly obviously logically possible conjunction of propositions describing in some detail some circumstances in which the former proposition would be true. Since whatever is entailed by a logically possible proposition is logically possible, thereby I show the former proposition to be logically possible. Thereby I hope to make sense of what it would be like for that proposition to be true.

Persons

This chapter, then, considers what it means and whether it is logically possible that there exists an omnipresent spirit. By a 'spirit' I understand a person without a body, a non-embodied person. 'Omnipresent' means 'present everywhere'. That God is a person, yet one without a body, seems the most elementary claim of theism. It is by being told this or something that entails this (for example, that God always listens to and sometimes grants us our prayers, he has plans for us, he forgives our sins, but he does not have a body) that young children are introduced to the concept of God. In setting out to make sense of the concept of a

non-embodied person I shall not discuss any qualifications that might need to be made to the doctrine held by all theists that God is such a person, in order to make it compatible with two specifically Christian doctrines—the doctrines of the Trinity (that God is three 'persons' of one substance) and the doctrine of the Incarnation (that God at one time acquired a human body, the body of Jesus of Nazareth). This book is concerned only with the most general doctrines about God common to theists, not with specifically Christian doctrines. I shall, however, in due course be arguing that theism is committed to the view that there are respects in which God is not a 'person', but I am postponing consideration of those respects until Part III.

A person is a mental substance. A 'mental substance', as I shall use the term, is one that has some mental property essentially—that is, of logical necessity it could not be that substance if it did not have such a property. A 'pure mental substance', as I shall use the term, is one that needs to have only pure mental properties in order to exist. A 'physical substance', as I shall use the term, is one that needs to have only physical properties in order to exist. I shall understand by a 'mental property' any property that is such that any substance that has that property necessarily has privileged access to the event of its having that property (by being able to experience that event) on all occasions when it has that property, and by a 'physical property' one that is such that any substance that has that property necessarily has no privileged access to the event of its having that property (by being able to experience that event) on any occasion when it has that property. Someone has privileged access to whether he has that property (by being able to experience the event of having that property) in the sense that, whatever ways others have of finding out whether he has that property, it is logically possible that he can use, but he has a further way (by being able to experience it) that it is not logically possible that others can use. I shall understand by a 'pure mental property' one that does not include a physical property—that is, one whose possession by a substance does not entail the possession by that substance of a physical property.

Mental properties include properties of perceiving objects, and properties of intentionally performing bodily actions. 'Seeing a door' is a mental property because someone can know better than can anyone else whether or not he is seeing a door (by experiencing seeing it); others can know as well as that person can that his eyes are looking in the

direction of a door, but he can know better than others whether or not he actually sees a door. And 'intentionally opening a door' is also a mental property, because, although others can know as well as the individual opening a door whether his hands are pulling a door open, he can know better than they can whether he meant his hands to pull a door open (by experiencing having an intention to open a door) or whether his hands were moving without him intending that they should move. But neither of these two properties is a pure mental property because, when a substance has one of them, that entails that some substance has a physical property. Both 'seeing a door' and 'intentionally opening a door' entail the existence of a physical object—a door—and so a substance having the property of being a door. Yet each of these mental properties also includes a pure mental property as a component—seeing a door includes having a visual image of a door, and intentionally opening a door entails having the intention to open a door.

These definitions have the consequence that there are some properties that are neither mental nor physical—I call them 'neutral properties'. These are properties that are such that some substances have privileged access (by being able to experience them) to whether they have that property, but other substances do not. These properties include formal properties (for example, 'being a property') and disjunctive properties (for example, 'being in pain or weighing 10 stone'). Both I (when I am in pain) and a filing cabinet (which weighs 10 stone) have the property of 'being in pain or weighing 10 stone'. Given that I have privileged access to whether I have the property of 'being in pain' and that no one has privileged access to whether he has the property of 'weighing 10 stone', it follows that I have privileged access to whether I have the property of 'being in pain or weighing 10 stone'. But a filing cabinet does not have privileged access to whether it has the property of 'being in pain or weighing 10 stone', because, not having a capacity for consciousness, it does not have privileged access to anything at all.

I shall understand by a 'mental event' one to which the substance involved has privileged access (by being able to experience it), by a 'physical event' one to which the substance involved does not have privileged access, and by a 'pure mental event' one which does not entail a physical event. While a substance having a mental property will always constitute a mental event, and a substance having a physical property will always constitute a physical event, a substance having a neutral

property may constitute either a mental or a physical event, dependent on the substance involved. There are at least five kinds of pure mental event—sensations (for example, a pain, or having a pattern of some colour in a visual field), thoughts (that is, occurrent thoughts, such as 'it is raining', occurring to someone), intentions (in the sense of intentions that the subject is currently trying to realize through her body or in some other way), beliefs, and desires (inclinations to do some action). The last four of these kinds are what I call 'propositional' events; they entail an attitude towards some proposition—a thought about it, an intention to cause it be true, a belief that it is true, or a desire that it be true. Sensations, thoughts, and intentions are conscious events; while we are having them, we are conscious of having them; beliefs and desires may exist while we are not conscious of them, but they are still mental events, because we can become conscious of them if we choose, and so have privileged access to them. And the capacity to have conscious events is also a pure mental event, because someone who has that capacity has privileged access to whether he has that capacity. Our mental lives consist of a succession of pure mental events. If we ceased to have any sensations or intentions or other pure mental events, or the capacity to have such events, we would cease to exist. Hence we human persons are mental substances.[1]

Clearly many non-human animals are mental substances in the above sense (they exist only as long as they have the capacity to have sensations), and, although their bodies and physical properties are not greatly dissimilar from ours, we do not count them as persons. And this is surely because, to be a person, someone must be capable of having, as well as sensations, propositional events of all the above kinds of some sophistication. Persons can have beliefs about datable events in the distant past and future, and beliefs about the invisible constitutions of visible objects (for example, that observable things are made of particles too small to be seen). They can have beliefs that some particular proposition makes some other proposition probable. And they can have thoughts that these things are so—that is, they can apparently conceive their being so—without necessarily believing that they are so. They can

[1] I argue in *Mind, Brain, and Free Will* (Oxford University Press, 2013), esp. ch. 6, that we humans are pure mental substances, but I do not need that conclusion for the purposes of this book.

form intentions to communicate beliefs and thoughts to other persons, and they can acquire true beliefs about the mental events of other persons. Above all, they can have moral beliefs—beliefs that this or that action is morally good or bad, obligatory or wrong, to be contrasted with beliefs that the action is one that they desire to do, or one that they would feel happy if they had done. If a substance is capable of having sophisticated propositional events of these kinds, then it is a person; and if it is not capable of this, then it is not a person. (We may count human babies as capable of having such properties in virtue of the fact that they will be able to have them in a few years' time in consequence of normal developmental processes, or we may count such babies are not yet persons because they are not able to have them now.)

I understand by a human person, a person who has a similar anatomy, physiology, and ancestry (that is, belongs to the same race of interbreeding creatures) as innumerable paradigm examples of 'humans'. Any other embodied creatures who have the above events, even if they are of totally different appearance and ancestry from humans, for example, ones whom we discover to be living on a distant planet, surely also count as persons but not as humans. The question raised in Chapter 2 now arises whether it is logically possible that there could be a pure mental substance, one that needs only pure mental properties in order to exist. Such a substance that did not have any physical properties, and so no body, but only pure mental events of the kind listed above characteristic of persons, would still surely properly be called a 'person'. So, then, could there be such a non-embodied person, whom we may call a 'spirit'?

Intentional Agency

The capacity to perform intentional actions is a central property of persons. In order to analyse the concept of a person and so the concept of a spirit more fully, I need to devote several paragraphs to explaining some terminology. An 'intentional action' is one that an agent means to do. When we do an intentional action, we have an intention that we are trying to put into effect, normally by moving our body in some particular way. Having an intention is thus something we do, not something that happens to us. (This 'intention' in what one is doing is to be distinguished from an intention for the future—for example, to do something tomorrow. I am not concerned here with intentions for the future.)

When I walk to the railway station intentionally, I have the intention of walking there. The intention guides my movements. But I could still have the same intention, even if suddenly the road was blocked or I became paralysed. To have an intention of this kind to do some action is thus the same as trying to do that action, although normally we speak of someone 'trying' to do some action only if they do it only with difficulty, or do not succeed in doing it.[2] We often do one action as a stage towards doing another action. I go to London by going to the railway station and getting on a train. I go to the station by walking along Walton Street. In such a case, what we may call my 'ultimate intention' is to achieve some goal. I have a belief about which will be the best route by which to achieve that goal, and the ultimate intention plus the belief determine what we may call my 'executive intention', my intention to achieve a stage towards the ultimate goal. One executive intention plus a belief about how to achieve its goal may determine a yet more limited executive intention, until we come to an intention to achieve some goal that I can achieve without needing a belief about how to achieve it. An intentional action that one does without needing a belief about how to do it is called an 'instrumentally basic action', and the intention to perform such an action is an instrumentally basic intention.

For most of us, moving an arm or saying a sentence are instrumentally basic actions, whereas going to the railway station is not an instrumentally basic action; I cannot go to the railway station without having a belief about which other actions I need to do in order to get there. Intentional actions (apart from actions of having an intention—that is, trying; see later) consist in bringing about some effect. An agent P bringing about an effect *E* as an instrumentally basic action, when it is not done in order to achieve some further goal, is explained merely by P having the intention to bring about *E*, and having the power to do so being among his basic powers (that is, those that he can exercise by performing an instrumentally basic action). An agent performing some executive action is explained by his ultimate intention, his belief that doing the executive action will be a stage towards achieving the ultimate intention, and his power to perform the executive action. The latter power is explained by the agent having the power to do instrumentally

[2] For further argument in support of thesis that every intentional action involves trying, see Jennifer Hornsby, *Actions* (Routledge and Kegan Paul, 1980), ch. 3.

basic actions that will constitute his doing the executive action and his belief that they will constitute it.

An intentional action *A* that is not instrumentally basic is either one that the agent does by doing a sequence of instrumentally basic actions (as when I walk to the railway station by making many separate steps), or is an intended consequence of her doing an instrumentally basic action *A**. *A** might consist of bringing about an event *F*, which causes an event *E*, when doing *A* consists of bringing about *E*. Thus, if I intentionally break a window (non-basic action) by throwing a ball at it (basic action), throwing the ball consists in causing the ball to move in such a way as to cause the window to break (as a result of the operation of laws of nature over which I have no control). But doing *A* can be a consequence of doing *A**, without the relation between them being a causal one. It may be the result of a current convention, that doing *A** constitutes doing *A*. Thus, given the current conventions in banking and bicycling, my writing my name in a certain place has a consequence that I have signed a cheque, which allows someone to take some money from my bank account, and my putting my arm out to the right has a consequence that I have signalled my intention to make a turn to the right. By contrast, although various internal bodily events have to happen if we are to succeed in doing most of the basic actions that we do, we do not normally bring them about as instrumentally basic actions. We do not move an arm by intentionally contracting a muscle as a means to making the arm move, or utter a sentence by intentionally twisting the tongue and pursing the lip in a certain way—for most of us do not know which muscle to contract in order to move an arm, or which tongue twisting or lip pursing will cause the relevant sounds to come out of our mouth. We just move the arm or utter the sentence.

There is a difference between an 'instrumentally basic action' and a 'causally basic' action.[3] An action *A** is causally more basic than an action *A* iff the agent does *A** intentionally, *A** causes some effect *E*,

[3] The two writers who introduced and developed a distinction between basic and non-basic (or mediated) actions are A. C. Danto ('Basic Actions', *American Philosophical Quarterly*, 2 (1965), 141–8) and R. M. Chisholm ('The Descriptive Element in the Concept of Action', *Journal of Philosophy,* 90 (1964), 613–24.) The words 'basic' and 'mediated' are Danto's; Chisholm contrasts making things happen 'directly' and 'indirectly'. Annette Baier ('The Search for Basic Actions', *American Philosophical Quarterly*, 8 (1971), 161–70) pointed out that these authors make slightly different distinctions from each other. She calls Danto's sense of 'basic', 'causally basic', and Chisholm's sense, 'instrumentally basic'; and I am following her terminology.

doing *A* consists in causing *E*, and the agent did *A** in order to bring about *E*. A causally basic action *simpliciter* is an intentional action that an agent does without doing it by doing some more causally basic action. Since in the case of every bodily action, and—most of us assume—even in the case of pure mental actions (such as intentionally forming a mental image), various physical events in the brain and elsewhere in the body need to occur if we are to perform the action, it must be that, when I intentionally perform a bodily action, such as cause my hand to move, I must be doing so by non-intentionally causing those brain and other internal bodily events. (Although causing such internal bodily events are not normally intentional actions, we can be trained to cause them, by learning for which instrumentally basic actions their occurrence is causally necessary.) Since, unknown in advance to the agent, any of these physical events necessary for the performance of an intentional action may fail to occur, the agent may try to do the intentional action (that is, have the intention of doing it) but not succeed in doing it. The only kind of intentional action that is such that, if we try to do it, inevitably we succeed in doing it is the intentional action of trying (that is, having an intention); inevitably, if we try to try, we succeed in trying. Since all intentional actions are initiated by trying to do them—that is, having the intention to do them—the only causally basic actions *simpliciter* are intentions. But, while all causally basic actions are also instrumentally basic, there are very many instrumentally basic actions that are not causally basic. To repeat the definition—an instrumentally basic action is one that one does without needing a belief about how to do it. Instrumentally basic actions include most actions of intentionally moving our limbs; and so not merely trying to move an arm, but moving the arm, is (for most of us) an instrumentally basic action. And so too are many actions of bringing about events outside the body. I tie my shoelaces straight off without needing a belief about which bodily movements I need to make in order to do so.

The Concept of an Omnipresent Spirit

Armed with these technical terms, we can begin to answer this question of what it is to be an omnipresent spirit by asking what it is for a person to have a body; and we can answer that question by asking another question—what is it that I am saying when I say that this body, the body

behind the desk, is *my* body? This question has been well discussed by Jonathan Harrison.[4] Harrison suggests that there are five things involved in this body being my body. The first is that disturbances in it cause me pains, aches, tingles, and so on, whereas disturbances in the table or the body over there are unfelt by me. The second and related thing is that I am aware of much of what is happening to the inside and outside of this body, without needing to infer this from anything else. I simply feel the emptiness of this stomach and the position of these limbs. The third thing is that I can move many parts of this body as an instrumentally basic action—whereas I can move parts of some other body or thing only by moving parts of this body. To move the arm belonging to the body over there I have to grasp it with this arm, but I can move this arm straight off. The fourth thing is that I look out on the world from where this body is. It is things around this body that I see well, things further away that I see less well. I learn about other things in the world by their effects on this body (that is, on the sense organs of this body). The fifth thing is that my thoughts and feelings are affected non-rationally by events in this body. Getting alcohol into this body makes me see double. Now clearly a person has a body if there is a physical object to which he is related in all of the above five ways. And clearly a person does not have a body if there is no physical object to which he is related in any of the above five ways. But what are we to say if a person is related to different physical objects in each of these ways, or is related to a physical object in only some of these ways? Presumably that he is embodied only to some degree.

Clearly God is not supposed to be embodied in either the first or fifth way. There is no physical object, in which disturbances cause God pains; nor any physical object whose state affects non-rationally the way in which God thinks about the world. On the other hand, God is supposed to be able to move any part of the physical universe directly; he does not need to use one part of the universe in order to make another part move. He can make any part move as an instrumentally basic action, merely by performing the causally basic action of having the intention that it should move, without the need to do so by (non-intentionally) causing any brain events or other physical events that in turn produce the

[4] Jonathan Harrison, 'The Embodiment of Mind, or What Use is Having a Body?', *Proceedings of the Aristotelian Society*,74 (1973–4), 33–55.

movement. There is no one place from which God looks out on the world, yet he knows without inference about any state of the world (although it is the normal view that he does not know this by (in a mundane sense) 'seeing' it); he does not need some parts of the universe to convey information to some sense organ in order to acquire this knowledge. Yet, although God is supposed to be related to the physical universe in some of the ways in which we are related to our bodies, the crucial difference is that God is not supposed to be tied down to acting or learning through it or any chunk of matter. He does not need the universe to exist at all in order for him to act or know; he could annihilate it by an instrumentally basic action at an instant and continue to exist without a universe, or create another one as an instrumentally basic action, doing both actions by performing the causally basic action of forming the intention to do them. For this reason it seems less misleading to say that he is not embodied. So the claim that God is 'a spirit' is to be understood as the claim that he is not tied down to acquiring knowledge or causing effects by acting through any particular chunk of matter.

I shall understand the claim that God is 'omnipresent' as the claim that he can cause effects at every place directly (as an instrumentally basic action) and knows what is happening at every place without the information coming to him through some causal chain—for example, without needing light rays from a distant place to stimulate his eyes. A fuller version of this doctrine was expounded very clearly by Aquinas. He argues for the proposition that 'God is everywhere in substance, power, and presence' on the ground that 'God exists in everything by power inasmuch as everything is subject to his power, by presence inasmuch as everything is naked and open to his gaze, and by substance inasmuch as he exists in everything causing their existence'.[5] God being everywhere by power and substance thus entails that he can cause effects at every place directly; God being everywhere by presence entails that he knows what is happening in every place, without being dependent for that knowledge on causal chains.[6] What it is for God to 'exist in everything causing their existence' will be examined in the next chapter.

[5] *Summa Theologiae*, Ia.8.3.

[6] Medieval philosophers were careful to rebut the suggestion that God has in any literal sense his dwelling in Heaven, a place that most of them supposed to lie beyond the outermost sphere of the stars. They held that God might be in Heaven in a particular

So much for what it is for there to be an omnipresent spirit. Is it logically possible that there be such a being? I suggest that it is. It is easy to spell out in more and more detail what such a supposition amounts to, and, as I argued in Part I, this more detailed spelling-out provides a direct proof of logical possibility. Conceive of some person gradually ceasing to be affected by alcohol or drugs, and their thinking remaining fully rational, however scientists interfere with her brain. Conceive too that she ceases to feel any pains, aches, or thrills, although she remains aware of what is happening in what was her body. She gradually finds herself aware of what is happening in bodies other than her own and other physical objects at any place in space—at any rate to the extent of being able to give invariably true answers to questions about these things, an ability that proves unaffected by other people interfering with lines of communication—for example, turning off lights so that no light is reflected by the objects of which she is aware. She sees both the insides and the outsides of all things. She remains able to talk and wave her hands about, but finds herself also able to move, as an instrumentally basic action, anything else that she chooses, including the hands of other people, and to utter words that can be heard anywhere. She can do these things without needing to act through brain events or other physical events in order to do so. However, although she finds herself gaining these strange powers, she remains otherwise the same—capable of thinking, reasoning, wanting, hoping, and fearing. The existence of such a person would entail, indeed would constitute, the existence of an omnipresent spirit. Surely this is conceivable; we can make sense of what it would be like for this to happen. So it is logically possible. Of course, one cannot imagine this, in the sense of being able to have a full mental image of someone doing and having happen to him all these things; but, as mentioned in Chapter 2, conceivability does not require imaginability. If an opponent cannot make sense of this description, it should be clear to many a proponent of the logical possibility of what is being described how to spell it out more fully so as to make sense of it.

way, but he is present everywhere. See, e.g., Aquinas, *Summa contra Gentiles*, 3.68.7–8. For this view of course they could provide plenty of support in the form of quotations from the Old Testament, e.g. 1 Kings 8:27; Jeremiah 23:23–4.

Arguments against the Logical Possibility of a Spirit

There are, however, various arguments deployed in recent years against the logical possibility of there being a non-embodied person, a spirit, of any kind, whether or not an omnipresent spirit of the kind described above. There are, to start with, various arguments of a kind discussed in Chapter 4 that purport to show that it makes sense to ascribe to a person pure mental properties only if that person has a body through which he can give natural expression to those properties. For example, it is suggested that a person can have wants, hopes, and fears only if he can give public expression to his wants, hopes, and fears. Only a person who sometimes runs away can rightly be said to fear things. Only a person who shows interest in things or takes steps to get things can rightly be said to want. Hence a person without a body can have no fears or wants, for he will be unable to run away or show interest. And so, more generally, the argument is that no being can have any pure mental property without also having a body through which that property can be manifested.

This kind of argument is, however, far too quick. For, first, it seems that a person may have many wants or fears to which she never gives expression; and, secondly, a spirit can give expression to wants and fears even though not through her body. To start with the first point, quite clearly a person may on occasion give no public expression to her mental states—she may want something that she takes no steps to get, fear something and yet show no signs of fear. This may be because she has no opportunity to give expression to her wants or fears (there may be not the slightest possibility of her getting what she wants, and so no point in her trying to get it) or because she inhibits the wants or fears. Why should it not always be the case for some person that for one or other of these reasons she does not ever give expression to her mental states? However, whether or not this is logically possible, a spirit can give expression to her wants or fears, hopes, preferences, and so on, even though she lacks a body. If she wants a certain man not to die of thirst, she may intervene in natural processes to cause rain. If she fears that a certain man will make a wrong choice, she may make marks on the sand conveying a message to him. And so on. In the view of traditional theism, not merely can the omnipresent spirit who is God give public expression

to his mental states but he often does so—by keeping the world in existence, controlling its development, and from time to time interfering in what is happening in it.

The most substantial argument of recent years against the logical possibility of there being a spirit, whether or not an omnipresent one, is an argument given by, among others, Terence Penelhum, which concerns the lack of identifying criteria for a non-embodied person, criteria for distinguishing one spirit from any other one. Penelhum discusses mainly the case of disembodied persons—that is, persons who formerly had bodies that now lie in graves or have been cremated—but his conclusions apply generally to the case of non-embodied persons. He writes:

> We need some way of understanding the identity of the disembodied being through various post-mortem stages, and some way of understanding the statement that some such being is identical with one particular pre-mortem being rather than with another. We shall not be able to understand either unless we can also understand the notion of the numerical difference between one such disembodied being and another one.[7]

So, Penelhum claims, there must be some criterion for when one spirit at one time is the same spirit at another time.

The normal tests that we use for one embodied person P_2 at a time t_2 being the same person as a person P_1 at an earlier time t_1 are the tests of bodily continuity (that P_2 and P_1 have the same body) and continuity of memory and character (that P_2's apparent memories include many of those of P_1 and that his character is similar to that of P_1). That P_2 and P_1 have the same body is something that we might come to know by keeping P_1's body under continuous observation. But we are more likely to come to know this in a more indirect way. Bodies of different persons normally look different (unlike, for example, pennies, which look much alike). We can see this by observing them simultaneously. So the fact that P_2's body looks much like P_1's body is evidence that it is P_1's body. Other evidence that two bodies are the same is provided by fingerprints, blood tests, and so on, and, above all since Penelhum's book was published, by DNA evidence (given the well-justified theory that it is immensely improbable that any two humans other than identical twins

[7] Terence Penelhum, *Survival and Disembodied Existence* (Routledge and Kegan Paul, 1970), 54.

have the same DNA). Now the test of bodily continuity is clearly not available to establish that non-embodied persons at different times are the same person, and so, if there is sense in talking about two such persons being the same, this must, Penelhum claims, be a matter of their having similar apparent memories and character.

However, Penelhum plausibly claims that the test of continuity of memory and character would by itself give no adequate answer to a question whether two persons were the same. Character would hardly suffice to distinguish between persons, since two different persons often have very similar characters. Penelhum has various connected reasons for saying that memory too would not help to provide the needed distinction. One such reason is that a person's apparent memories are only properly called 'memories' if it makes sense to suppose that we can check on them. If I claim to remember having been in London last month, we can look for a witness who can testify to my presence. But if I have no body that could have been observed in London, Penelhum argues, this cannot be done. If what someone says that she 'remembers' cannot be checked, it is not properly called a 'memory'. So the memory test does not work, Penelhum claims, to establish the identity of persons without help from the bodily test. Since the latter cannot be had for persons without bodies, 'we cannot give content to the individuation of one incorporeal being from another',[8] for there would be no way of distinguishing between incorporeal beings. Penelhum suggests that the only escape route for theism would be for it to claim that there was only one such being (presumably, God), in which case the need to individuate incorporeal beings, to distinguish them from each other, would not arise. This is not to my mind a very attractive escape route for theism, for many theists have wished to claim that there are many incorporeal beings (for example, angels, and spirits of the departed), only one of whom was God. In any case, I believe the argument to be unsound and the conclusion to be false.

Much recent philosophical writing has been devoted to this problem of wherein consists the identity of persons. I shall make one point very briefly and then argue for another at much greater length. The first point is that, at any rate for non-embodied persons of limited powers such as

[8] Penelhum, *Survival and Disembodied Existence*, 108.

ghosts or Homeric gods, memory claims might be checkable. If a ghost claims to have been in London at a certain time, his claim can be disproved by showing that he was a long way away at the time or proved by showing that he was in London at the time. He cannot, of course, be *seen* in a place, but, if each such being has sufficiently idiosyncratic ways of manifesting his presence (idiosyncratic voice, and so on), he can be known to have been there. We could have good evidence that each non-embodied person had an idiosyncratic voice—for example, in the fact that the memory claims of each person with a certain voice included the previous claims of any person with that voice; and we could have good evidence that these claims typically concerned events in only one place at one time. Of course, we may make a mistake in our judgements in this matter—we may think that today's ghost is the same as yesterday's, and be mistaken. But we may always make mistakes about the identity of embodied persons too. We may use bodily continuity to reach conclusions about personal identity. But how do we know that two bodies, B_1, the body we saw yesterday, and B_2, the body we see today, are continuous? Because they look alike? But maybe we are looking at the bodies of identical twins who have the same DNA. Because we seem to remember having kept B_1 under continuous observation and seen it to be continuous with B_2? But maybe our memory is in error. We may be in error about almost anything, but by the principle of credulity we are justified in assuming that things are as they seem to be in the absence of reason for thinking otherwise. Our results for ghosts could be extended to omnipresent spirits. If a voice of a spirit made claims about events at all places and acknowledged that previous claims made in the same voice were his claims, and if as a result of conversations with ourselves in which we asked the voice for certain effects to be produced at various distant places the effects occurred, we would, I suggest, have grounds (albeit not conclusive grounds) for the claim that the voice and the effects were the voice of and effects produced by the same omnipresent spirit. Along these lines with much filling-out of detail I suggest that an adequate defence can be made of the test of memory (with character) as a (fallible) test for the identity of non-embodied persons.

However, Penelhum's discussion, like so many other recent discussions of personal identity, seems to me to fail to keep distinct two very different questions about personal identity. The first question is: what constitutes a person P_2 at a time t_2 being the same person as a person P_1

at an earlier time t_1? The second question is: what evidence can we have that a person P_2 at t_2 is the same person as a person P_1 at t_1 (and how are different pieces of evidence to be weighed against each other)? I shall argue for the rest of this chapter that the identity of a person over time is something ultimate, not analysable in terms of bodily continuity or continuity of memory and character, which merely provide fallible evidence of personal identity. I shall reach this conclusion by considering the case of embodied persons. The following pages thus constitute a considerable digression from the main topic, but the results are crucial for it. The conclusion of this digression will be that a person can be the same person as an earlier person even if none of the evidential tests is satisfied. It follows that it is logically possible that one non-embodied person is the same as an earlier one, even if no evidence can be produced to show that he is.

The Nature of Personal Identity

I begin by surveying at slightly greater length than I have done so far the kinds of solution given to the problem of personal identity, treating them for the moment as answers to our first question. So treated, the 'tests' for personal identity become criteria for what it is to be the same person as an earlier person. The first kind of answer to the first question, which derives ultimately from that given by John Locke[9] and David Hume[10] then holds that personal identity is a matter of similarity of apparent memory and character. P_2 at t_2 is the same person as P_1 at t_1 iff P_2's apparent memories include most of those of P_1, and P_2 behaves in ways similar to P_1. If there is a considerable temporal interval between t_1 and t_2, then it suffices, for P_2 to be the same person as P_1, that there is a series of persons P_n at times t_n intermediate between t_1 and t_2, such that the apparent memories of each person include almost all those of any person

[9] John Locke, *An Essay Concerning Human Understanding*, 2.27.19, describes personal identity as consisting in 'identity of consciousness' by which he means 'apparent memory': 'If Socrates and the present mayor of Queenborough agree [in identity of consciousness—i.e. the mayor (apparently) remembers what Socrates experienced], they are the same person; if the same Socrates waking and sleeping do not partake of the same consciousness, Socrates waking and sleeping is not the same person.'

[10] David Hume, *A Treatise of Human Nature*, 1.4.6, claims that a human is 'nothing but a bundle or collection of different perceptions which succeed each other with an inconceivable rapidity', connected by relations of 'resemblance' and 'causation'. But in the Appendix to the *Treatise* he expresses doubts about whether this account is correct.

slightly earlier in the series, and each person is very similar in character to any member of the series existing at a temporally proximate moment.

The second kind of answer to the first question claims that personal identity is a matter of bodily continuity. P_2 is the same person as P_1 iff he has most of the same body as P_1. A body B_1 is the same body as a body B_2 iff they are spatiotemporally continuous, in the sense that they are connected by a continuous spatio-temporal path at each point of which there exists a body somewhat similar qualitatively (that is, in appearance and construction) to its neighbours. This second answer is often amended in recent writing in a very important respect. Bodily continuity is understood as continuity, not of all parts of the body, but only of that part, the brain, that is the part that most directly influences a person's memory and character. On this view, P_2 is the same person as P_1 iff he has most of the same brain as P_1, even if it has been transplanted into P_2's body. Neither the memory-and-character solution nor the bodily solution is especially plausible if taken in isolation from a solution of the other kind; and clearly the most plausible account will use both kinds of criteria, and provide a detailed account of how the criteria of bodily (or brain) continuity, similarity of memory, and character are to be understood and weighed against each other. Clearly such an account will provide an answer also to my second question—what is the evidence that a person P_2 at t_2 is the same person as a person P_1 at t_1? Without doubt, continuity of their bodies and especially of their brains is strong evidence that P_2 and P_1 are the same person, and lack of such continuity is strong evidence that they are not. Apparent memory and character are, however, also relevant. If a woman turns up claiming to be Princess Anastasia and can tell us details of independently verifiable incidents in the Princess's life that would have been almost impossible for her to find out unless she were the Princess, that counts in favour of her being the Princess.

Accounts of the kind that I have just been setting out are plausible accounts of what we would be justified in claiming about whether or not P_1 and P_2 are the same person on the basis of different kinds of evidence. Yet most recent philosophers have put forward accounts on the lines that I have sketched above as answers to my first question, what constitutes P_2 being the same person as P_1, and it is in these terms that I have just sketched the pattern of such accounts. Such an account, which analyses personal identity as a matter of the degree of bodily continuity and continuity of memory and character, is called a 'complex' theory of

personal identity. I now argue that any such theory must be mistaken. Any complex theory of personal identity has as an inevitable consequence that sometimes (it is logically possible) there will be no right answer to the question whether two persons are the same. For there will always be logically possible cases where there is a candidate for being the same person as the earlier person who is just on the border of satisfying whatever are the criteria, and cases where there are two equally good candidates for being the same person as some earlier person; and this will be so, whatever the detailed form of the complex theory. There will be cases where P_2 has fairly similar apparent memories and fairly similar character to P_1, so that P_2 lies on the border between satisfying and not satisfying the criterion of memory and character for being the same person as P_1. The same applies to the criterion of bodily continuity, whether it is developed in terms of brain continuity or continuity of the whole body. Any complex theory must answer the question of how much of P_2's brain (or whole body) has to be continuous with P_1's in order for this criterion to be satisfied. If P_2 acquires only a small piece (a few parts) of P_1's brain, clearly the brain criterion is not satisfied, and if P_2 acquires all P_1's brain except a small piece, clearly it is satisfied. But what about the case where P_2 acquires half of P_1's brain (or all his body except a quarter of the brain)? However you interpret the criterion of bodily or brain continuity, it is easy to conceive of circumstances under which P_2 lies on the border between satisfying and not satisfying this criterion. Because there are conceivable circumstances where any criterion gives no clear result, there are conceivable circumstances where any complex theory of personal identity would give no answer as to whether P_2 is the same person as an earlier P_1. In such circumstances on a complex theory, it is the case that not merely is no one able to find out whether P_2 and P_1 are the same person, but there is no one right answer to whether or not they are the same person. The answer that they are the same is as near to the truth as the answer that they are different.

The situation would be similar to that of some other cases of identity such as the identity of a society or of an army. When is army A_2 at time t_2 the same army as army A_1at t_1? Clearly it is if A_2 has all the same soldiers in it as has A_1. Clearly it is not the same if all the soldiers of A_1 mutinied at an intermediate time and were replaced by new soldiers. But suppose that A_2 has a quarter of the soldiers who were in A_1 but that the other soldiers of A_1 have been gradually replaced by new soldiers. Are the two

armies the same? Our criteria of 'same army' give no definite answer—you can say that the armies are the same or you can say that they are different. There is no right answer. Hume described the similar situation, which he thought held with regard to the identity of persons, by saying that 'the identity, which we ascribe to the mind of man, is only a fictitious one'. That is a misleading way of putting the complex theory; the identity or lack of it is in *most* cases real enough—it is simply that in *some* cases there is no right answer as to whether two persons are the same—according to any version of a complex theory. But the identity of a society or an army seems to be different from that of a person—societies and armies are not mental substances. It does not seem to make sense to suppose that there could be 'no right answer' to questions of personal identity—for example, about whether a person P_1 survives the half- brain transplant operation. For either he will have all the experiences had by P_2 at some later time t_2, or he will have none of them; for no subsequent person has only half of such experiences. If he has the experiences had at t_2 by P_2, he is P_2, and if he does not have these experiences, he is not P_2.

Different thought experiments suggest that it is still logically possible that P_1 continues to exist, even if he keeps none of his brain matter. Suppose that P_1 undergoes an operation in which a small diseased part of his brain (a tenth of the whole brain) is replaced by a similar part from another brain (perhaps that of a clone of P_1). People sometimes do have parts of the brain of that size removed, and it is normally supposed that the person after the operation is the same as the person before the operation. It is plausible to suppose that adding a replacement part after removing the diseased part would not change the identity of the person whose brain it was. So it seems at least logically possible—and plausibly true—that this operation keeps the original person alive, that the new brain is still his brain. But now suppose that each year a different tenth of P_1's brain is removed and replaced by a similar part from another brain (perhaps that of a different clone of P_1 on each occasion). At the end of ten years there is a person whose brain is made of entirely different matter (and in consequence might well have some quite different apparent memories and character). It seems at least logically possible that—because the process has been gradual and each new part has become integrated into the brain before a new operation is done—the resulting person is still P_1. It seems also logically possible that the resulting person is not P_1 (and so that at least one of the operations led

to the existence of a different person). So, again, there seem to be circumstances in which there is a truth about whether a later person is the same person as an earlier person, which is not entailed by and does not entail any proposition about the amount of brain matter and the similarity of mental life shared between the two persons.

So much for objections to complex theories. What can we put in their place? The only alternative is the simple theory, that personal identity is something ultimate.[11] On this theory, personal identity is not analysable into conjunctions or disjunctions of other physical or mental properties, or degree of continuity of bodily or brain matter. Bodily and brain continuity, continuity of memory and character, are, however, evidence of personal identity, but they do not constitute it. Rather, such thought experiments as the ones sketched above begin to make it plausible to suppose that it is logically possible that someone continues to exist without any continuity of body, memory, or character at all. To clinch the argument in favour of the latter view, consider finally this thought experiment. Every conscious event lasts for at least the short period of the 'specious present' and so consists of two co-experienced events that each lasts for half that period. A pain that lasts for a second consists, for example, of two pains that each last for half a second, co-experienced by the same person. Conscious events that occur in periods of 'specious present' may overlap. The second half of the experience of a pain during a specious present may be co-experienced with the first half of an experience of some noise; this noise may continue for a short time (during several overlapping periods of specious present), and after that be co-experienced with a certain tactual experience, and so on. When two conscious events are co-experienced, they are events of the same person; the overlap entails this.[12] It is, I suggest, fairly obviously logically possible that such a sequence of overlapping events could occur without

[11] This was the view expressed in the eighteenth century by Butler, and, less explicitly, by Reid. See J. Butler, 'Of Personal Identity', in his *The Analogy of Religion*; and T. Reid, *Essays on the Intellectual Powers of Man*, III.4. For full development of this view, see my *Mind, Brain, and Free Will*, especially ch. 6.

[12] For the point that any two overlapping conscious events, and so any sequence of such overlapping conscious events, entails that the same person has each of them, see John Foster, 'In Self-Defence', in G. F. MacDonald (ed.), *Perception and Identity, Essays Presented to A.J. Ayer* (Macmillan, 1979): 'it is in the identity of a stream [of conscious events] that we primarily discern the identity of a subject' (p. 176.) See also John Foster, *The Immaterial Self* (Routledge, 1991), 246–50.

any physical criteria or any criteria of continuity of memory or character being satisfied; and in that case the same person would continue to exist without any such criteria being satisfied. It is clearly logically possible that there is a person who is conscious with overlapping conscious events all the time that he exists. So it seems evidently logically possible that there be an omnipresent spirit who continues to exist over a period of time, his continued existence being unanalysable in other terms. God is supposed to be conscious all the time while he exists, and there is no reason to deny that all the conscious events that he has during that time form a sequence of overlapping events.

It follows naturally, and further thought experiments make it plausible, that human persons have thisness. A substance has thisness iff there could exist instead of it (or in addition to it) a different substance that has all the same properties as it, monadic and relational, including its spatio-temporal relations to earlier and later substances having such and such monadic properties and relations. For example, I might not have existed, but there might have existed instead of me a person who had the same body as I do, and lived exactly the same mental and physical life as I do; that is, his body would have made exactly the same movements, and he would have had exactly the same mental events as I do, and yet he would be a different person from me.[13]

The purpose of this long digression into the topic of personal identity has been to show that what makes a person the particular person he is is independent of his body or the continuity of his physical and mental properties; a person is not the person he is in virtue of satisfying 'criteria of identity' of these or similar kinds. That he is who he is is an ultimate fact, not reducible to any such facts. The main point being established—Penelhum's attempt to show the logical impossibility of there being an omnipresent spirit by claiming that it was not logically possible that there are non-embodied spirits at all because there would be no criteria of identity for them—fails. I therefore appeal to the apparent logical possibility of the supposition, which I have attempted to back up

[13] For a much fuller account of what it is for a substance to have thisness, see my *Mind, Brain, and Free Will*, 33–8; and for argument that human persons have thisness, see *Mind, Brain, and Free Will*, ch. 6. I argue there that, since humans on earth (contingently) have bodies, their thisness can be analysed in terms of an essential part of each person, his soul, having 'thisness'.

by spelling out in more detail what the supposition of the existence of an omnipresent spirit amounts to. Since all the words I have used to refer to properties,—'being a person', 'conscious', and so on—are informative designators, it follows that the supposition that there is an omnipresent spirit is also metaphysically possible, and so coherent.

8

Free and Creator of the Universe

In this chapter I shall consider what it means, and whether it is logically possible, to suppose that the omnipresent spirit that God is supposed to be, postulated in Chapter 7, is 'the creator of the universe' and has 'free will' in the sense in which God is supposed to have these properties. As in the previous chapter, I shall conduct the argument for logical possibility simply by expanding, telling a story of how the claim could be true, and in the process rebutting contrary arguments.

Creator of the Universe

The theist claims that God is the creator of 'the world' or 'the universe'. In other contexts the words 'the world' or 'the universe' may be understood in a fairly narrow sense—for example, as the system of all (physical and mental) substances that are spatially related to the earth. By 'spatially related' is meant 'in some direction at some distance' (for example, a million miles along such-and-such a line). That system includes all the physical substances, such as stars and planets and the tables, houses, and mental substances (humans and animals) situated on them, which are spatially related to the earth. This system forms *our* universe. This definition, however, allows for the logical possibility of the existence of universes or worlds other than ours. Each universe would occupy a different space; I argued in Chapter 2 for the logical possibility of there being more than one space. The theist who claims that God is the creator of the universe will, even if sometimes he uses the expression 'the universe' in a narrow sense, also claim that God is the creator of 'the universe' or 'the world' in a wide sense so as to include (if there are any such) all substances other than ones spatially related to ourselves, and

so—if there are any such—all mental substances that do not have any physical properties and so do not have a spatial location. The theist claims that God is the creator of all things. In the Nicene Creed he is said to be 'Maker of Heaven and Earth, and of all things, visible and invisible'.

But two initial restrictions must be put on this loose claim. First I shall assume for the present that the claim that there is a being who is the creator of all things is to be understood with the qualification 'apart from himself' or, more precisely, 'apart from anything the existence of which is entailed by his own existence'. I shall, however, need to re-examine this issue of whether God could create himself in Part III. Secondly, I shall assume that theism does not claim that God is the creator of any abstract objects such as numbers, concepts, logical relations, or any universals that exist independently of whether there are substances that have them, or of any propositions that exist independently of whether there are sentences that express them. It seems very strongly to some philosophers, following Plato, that such things exist timelessly and that it is metaphysically necessary that they do. They think, for example, that such propositions as 'there exists a prime number between 16 and 18', or 'there exists a relation of entailment between "John is over 5 foot tall" and "John is over 4 foot tall"' exist and have the modal status that they do of logical necessity. My own view is that such abstract objects exist only in so far as there are substances that have them or sentences that express them. But, whether or not I am right about this, these abstract objects do not, most of us feel, exist in the hard real way in which substances such as tables, chairs, and people exist. And, if there are such timeless abstract objects, it would seem that their existence cannot be due to the act of any creator or be entailed by the existence of a creator; for it would seem that they exist just because they are what they are, because the sentences that assert their existence are logically necessary. Again, this is a topic to which I shall need to revert in Part III. But for the present I shall assume that the proposition that there exists an omnipresent spirit who is the creator of all things is to be understood at least as the claim that there exists an omnipresent spirit who is the creator of all substances that exist, the existence of which is not entailed by his own existence.

People often think of the doctrine of God as creator as the doctrine that God causes the beginnings of the existence of all substances that exist. The theist, however, claims that God's action is needed not merely for things to begin to exist but also for them to continue in existence. We

could phrase this point by describing God as the creator *and* sustainer of all things, but it is simpler and in conformity with the usage of some medieval theology (though not of much modern writing) to make both points by the use of the one word 'create', and this I shall do. Aquinas held that natural reason could not prove either that the universe (in either the wide sense or a narrower sense) had always existed or that it had a beginning of existence.[1] Revelation alone (the Bible and the Church, that is) showed us, he thought, that the universe (in both senses) had a beginning of existence,[2] but that even without revelation natural reason could prove that it had a creator. Theists both before and after Aquinas have usually held that the universe (in both senses) had a beginning,[3] but for them, as for Aquinas, this doctrine can hardly have the importance in their thought possessed by the doctrine that God causes the existence of the universe at each moment of its existence. So I shall understand God being the creator of the universe at a time *t* as God sustaining the universe in existence at that time; that is, he causes at *t* the existence of all substances that exist then. If God exists eternally (in either of the two senses that I shall consider in Chapter 12), it then follows that he causes the existence of the universe at each moment of its existence; and, if it had a beginning of its existence at some time, then he caused that beginning. (The temporal relation of God's causal action to the things that he causes will be analysed more precisely in the next chapter.)

All 'things', however, is normally understood in one respect far more widely than I have analysed so far, so as to include not merely all 'substances', but also (with qualifications to which I will come shortly) all the things that happen to substances—that is, the occurrences of all logically contingent events. All the events in the world are caused by God, including the beginnings and endings of substances, and also their acquiring and losing properties (including relations to other substances). For example, God not merely creates the planets, but creates their motions around the sun, their changes of temperature, their collisions with comets, and so on. So God causes substances to behave in the ways codified by 'laws of nature', such as the law of gravitational attraction,

[1] See his *Summa contra Gentiles*, 2.32–8.
[2] See his *Summa Theologiae*, Ia.61.2–3.
[3] For analysis of what it means for the universe to have had a beginning, see Chapter 12.

and also causes substances to behave in ways not determined by laws of nature (if they do ever so behave). And God causes the occurrence of the pure mental events, such as the sensations and thoughts of humans and the higher animals. So in summary God causes the occurrence of all logically contingent events (including the existence of substances) apart from his own existence and all logically contingent events entailed by his own existence.

But there is an obvious difficulty with this simple understanding of creation. This is that, superficially, agents other than God cause a lot of things. Humans, not God, cause the existence of tables and chairs. Sun and rain, not God, cause the growth of plants. One could say that really humans, sun, and rain do not cause these things—they only appear to do so; really it is God alone who causes these things. But most theists have not wished to deny that humans, sun, and rain cause things.[4] The claim that God is the creator of all things has been understood more carefully, as the claim that God either himself causes, or causes or permits some other being to cause (or permits to exist or occur uncaused[5]), the occurrence of all logically contingent events (apart from his own existence and logically contingent events entailed thereby). Other beings, that is, often cause the existence or occurrence of things, but they do so because God causes or permits them to do so.

[4] The view that God alone causes things is known as occasionalism. On this view, other animate and inanimate agents and events merely provide the occasions on which God causes the things that are normally called their effects. Striking a match does not, on this view, cause its ignition. It is simply that, when matches are struck, God predictably makes them ignite. Occasionalism is a view much more common among Islamic philosophers than among Christian ones. Among many who taught it were Algazel and Sanusi—see the well-expressed passage from the latter in A. Guillaume, *Islam* (2nd edn, Penguin Books, 1956), 141–2. Occasionalism, which in its strictest form includes the doctrine that all human 'actions' are really only God's actions, is not, however, compatible with the (in my view) normal Christian doctrine that humans have libertarian free will (that is, free will to cause effects without being fully caused to do so by any cause). But the weaker form of occasionalism, claiming that no substances except rational beings (that is, God and any other creatures such as humans) who have libertarian free will cause effects, is compatible with Christian doctrine, though I see no good reason to adopt it.

[5] The point of the clause in parentheses is that there may be indeterminism in nature; events may happen without anything making them happen. If God is creator of the Universe, this can be only because he keeps nature indeterministic. It is not incompatible with his being creator of the universe that he should allow the existence of an element of chance in nature. For the sake of simplicity of exposition I shall in general omit this clause in future expositions of the doctrine of God as creator. It should, however, be understood where it is not explicitly stated.

A subsidiary claim that has often been made—for example, by Aquinas[6]—is that God alone, and not any other being permitted by God to do so, causes the existence of matter or of any non-material substances, such as human souls. I shall not consider this subsidiary claim further, since this claim does not seem to be very central to the theism. It would hardly seem important for theism if God on occasion permits some other being to create matter. He would hardly be less worthy of worship if he did so.

So in summary the doctrine that there is an omnipresent spirit who is the creator of the universe is to be understood (for the present), in view of the tradition of theism, as follows. There is an omnipresent spirit who either himself causes or permits other beings to cause or permit the occurrence of all logically contingent events apart from any, the occurrence of which is entailed by his own existence. However, to understand this doctrine more fully, we need to investigate (at greater length than I did in chapter 7) what it is for a person to cause or permit the occurrence of an event, or to cause or permit some other being to do so.

Causation

Philosophers have always held that there is an intimate connection between causation and laws of nature. On Hume's 'regularity' theory of laws, laws are just universal (deterministic) regularities in the patterns of events—the 'law' is simply what in fact always happens; 'all *A*'s are followed by *B*'s' is a law of nature iff every past, present, or future event of kind *A* is always followed by an event of kind *B*.[7] The low-level law that all iron expands when heated just is the regularity that all pieces of iron

[6] 'For creative action to be attributed to any creature is impossible, either by its own proper power or instrumentally as a minister' (*Summa Theologiae*, Ia.45.5). All that beings other than God can do, Aquinas claims, is (when given the power by God to do so) to rearrange existing matter, but not to create matter or anything not made of matter.

[7] In sect. 7 of the *Enquiry*, as in sect. 1.3.14 of his *Treatise of Human Nature*, Hume offered two different accounts of the regularities of nature and so of causation. The account that endured is that outlined in the text, and led to Hume's definition of a 'cause' as 'an object followed by another, and where all the objects similar to the first are followed by objects similar to the second' (David Hume, *An Enquiry Concerning Human Understanding*, ed. L. A. Selby-Bigge (2nd edn, 1902), sect. 7(ii), p. 76). By 'object' he means 'event'. Although Hume seldom used the expression 'law of nature', he regarded what others called 'laws' as regularities of the kind described. See his *Enquiry,* note to p. 73, where he discusses—but not under that name—Newton's 'first law'. But see too his discussion of

always have expanded, do expand, and will expand when heated. Most philosophers since Hume have advocated more complicated versions of Hume's theory. First they have allowed that there may be statistical or probabilistic laws that are regularities in what happens a certain proportion of times—for example, that all atoms of carbon-14 have a (statistical) probability of 1/2 of decaying within 5,600 years. Then, they have distinguished between fundamental laws of nature and non-fundamental laws which are entailed by fundamental laws. The fundamental laws of nature are the fundamental regularities in the successions of events, such as Newton's three laws of motion and his law of gravity that every material object having a mass m and every other material object having a mass m' is followed by the two objects having an acceleration towards each other of mm'/r^2. These entail non-fundamental laws about what will happen in certain conditions—for example, Newton's three laws of motion and his law of gravity (together with information about the size and mass of the earth) entail Galileo's law of fall, that all non-constrained bodies being near the surface of the earth are followed by them falling towards the centre of the earth with a constant acceleration of (approx.) 32ft/sec^2. Most statistical laws are derivative laws, but the statistical laws of Quantum Theory seem to be fundamental laws. On a Humean view, all fundamental laws (universal or statistical), and hence all non-fundamental laws, are just regularities in the behaviour of objects.

Then, according to Hume, what causes what is a consequence of what are the laws of nature. A particular event ϵ (the initial condition) causes another event γ iff ϵ belongs to some kind A and γ to some kind B, where 'All A's are followed by B's' is a law of nature. So, because it is an instance of the regularity that is the law of gravity, the event of the sun having a mass of m and the earth having a mass m' cause the sun and the earth to move towards each other with an acceleration of mm'/r^2. Or, rather, this is what would happen if the only operative law was the law of gravity, and the only relevant initial conditions were the mass and position of the sun and the earth. But, given the operation also of the three laws of motion, and the occurrence of the event (additional initial condition) of the earth having a large initial velocity, all the laws and all the initial conditions taken together entail that the earth will move in an ellipse

miracles where he does use the phrase 'law of nature' (*Enquiry*, sect. 10, and especially p. 114).

centred on a point close to the sun. All the preceding events (the initial conditions) taken together cause this motion. If laws of nature are statistical, the causation by the initial condition is partial causation; the cause increases the probability of the subsequent event, but it does not make it inevitable.

There is, however, a distinction between laws of nature and mere accidental regularities, such as might be 'all communities of vertebrates on a planet are followed within two billion years by communities of apes on that planet'. (The only known instance of this regularity is its occurrence on earth, but it might hold on a few other planets of other suns, on which there were vertebrates.) David Lewis produced an improved version of regularity theory that tries to take account of this distinction. For Lewis, 'regularities earn their lawhood not by themselves, but by the joint efforts of a system in which they figure either as axioms or theorems'.[8] The best system is the system of regularities, which is the simplest theory from which the occurrence of all (or almost all) actual events (past, present, and future) follow. The true laws are the regularities (fundamental and non-fundamental) of the best system. Accidental generalizations are regularities that do not fit into such a system; they float loosely without being derivable from more fundamental regularities. So 'all communities of vertebrates on a planet are followed within two billion years by communities of apes on that planet', even if true, is probably not a law, because it probably does not follow from the best system. This is evidenced by the evident fact that it does not follow from our current best approximation to the best system—a conjunction of Quantum Theory, Relativity Theory, and standard particle theory (including the laws of the four forces, such as the force of gravity), on which any laws of chemistry and biology seem to be depend. But it remains the case, on Lewis's improved regularity account of laws of nature, that what causes what is a consequence of what are the laws of nature: a particular event ϵ causes another event γ iff ϵ belongs to some kind **A** and γ to some kind **B**, and it follows from such a best system (and certain other complicated conditions hold) that 'All **A**'s are followed by **B**'s' is a law of nature.[9]

[8] David Lewis, 'A Subjectivist's Guide to Objective Chance', in *Philosophical Papers*, ii (Oxford University Press, 1986), postscript, p. 122.

[9] Lewis, 'A Subjectivist's Guide to Objective Chance', ch. 21.

An alternative modern account of the nature of 'laws of nature', articulated in slightly different ways by Armstrong, Tooley, and Dretske,[10] claims that laws are not merely simplest summaries of all actual events, but (logically contingent) relations of natural necessitation (or probabilification) between 'universals'—that is, between properties in my sense. I call this account the 'relations-between-universals' (RBU) account. On this account, for example, Newton's law of gravity, the law that 'every material object having a mass m and every other material object having a mass m' is followed by the two objects having an acceleration towards each other of $mm'/r2$.', is to be analysed as there being a relation of physical necessity joining the universals of 'mass', 'distance', and 'force' of such a kind that when universals of 'mass m' and 'mass m'' are instantiated in two material objects at a distance r from each other, there is a force of attraction between them proportional to mm'/r^2. (On Tooley's version of this account, which I believe to be the more satisfactory one, properties and the relations between them exist whether or not there are any substances whose behaviour is governed by them.) Like the regularity account, the RBU account holds that whether one event causes another one is a consequence of laws of nature.

The third major theory of the nature of 'laws of nature' and the relation of causation to laws of nature is the theory of the regularities of nature (not always called 'laws') normally taken for granted before Hume, and recently revived by R. Harre and E. H. Madden and by Brian Ellis.[11] On this theory (the substances-powers-and-liabilities (SPL) theory) causation is an unanalysable relation between a substance (*not* an event) and an event (its effect). On the SPL account the fundamental laws are regularities, not regularities of successions of events, but regularities in the causal powers and liabilities of substances—powers naturally to necessitate (or to make naturally probable), that is, to cause effects; and liabilities of natural necessity to exercise those powers under certain circumstances or under all circumstances. (For the meaning of 'natural' necessity and probability, see Chapter 2 n. 17.) Thus Newton's law of

[10] See David Armstrong, *A World of States of Affairs* (Cambridge University Press,1997), esp. chs 15, 16; Michael Tooley, 'The Nature of Laws', *Canadian Journal of Philosophy*, 7 (1977), 667–98; and F. I. Dretske, 'Laws of Nature', *Philosophy of Science*, 44 (1977), 248–68.

[11] See R. Harré and E. H. Madden, *Causal Powers* (Basil Blackwell, 1975); Brian Ellis, *Scientific Essentialism* (Cambridge University Press, 2001).

gravity is the regularity that each material body has a power to cause each other material body to be attracted to it, and the liability to exercise that power on any body at a distance *r* from it in accord with the stated equation. The SPL account needs to add a requirement similar to that of the (Humean) regularity and RBU accounts that causation results from all the substances exercising their causal powers at the same time. On the SPL account, this is the requirement that the powers of substances must be regarded more precisely not as powers to cause effects, but as powers to exercise a certain kind and amount of causal influence. This is because many of the powers that a substance may exercise can be prevented from causing any effect (or as much effect as they would otherwise cause) by the exercise of a contrary power by some other substance. The effect of the causal influence of sun and earth on each other is limited by the power of the earth to continue to move with its present velocity in a straight line; and the net effect of the exercise of both powers (which sun and earth have liabilities to exercise) is that the earth moves in an ellipse. A planet may exert force on another planet, attracting the latter towards it; but have no effect because a third planet is exercising a force of equal strength attracting it in the opposite direction. So the SPL account must say that substances have powers to exercise causal influence of a certain kind and strength (defined in physics as a 'force') and the liability to do so always or under certain initial conditions (for example, when there is another body at a certain distance). The effect produced is a resultant of the amount of causal influence exerted by different substances. (To make my subsequent points easier to follow, I shall—where the distinction is not needed—write only of 'powers to cause' and not 'powers to exercise causal influence'. I ask the reader to understand the former in terms of the latter.)

On the (Humean) regularity and RBU accounts, it is events that are the causes; on the SPL account, it is substances that are the causes. On the Humean and RBU accounts, laws of nature are the basic realities; causation is simply a consequence of their operation. On the SPL account, causation is the basic reality; laws of nature are simply regularities in the causal powers (and liabilities to exercise them) possessed by substances; strictly speaking, 'laws' are not things, and exercise no causal influence; they are just generalizations about the influence exercised by substances.

Clearly (given that we reject occasionalism) there are true explanations of most mundane events of a kind that I will call 'scientific' or 'inanimate'

explanation, normally expressed in terms of 'laws of nature' (fundamental or non-fundamental) and 'initial conditions' (the cause). This way of articulating scientific explanation readily fits the regularity or RBU accounts of laws of nature and causation. The law (or laws) of nature are such that it is a (deductive or probabilistic) consequence that the initial conditions (the event that is the cause) is followed by the effect. The law (or laws) and the initial conditions then jointly explain the effect. A particular explosion is explained by the ignition of a particular volume of gunpowder in certain conditions of temperature, pressure, and humidity of the gunpowder and the surrounding air, and the law of which it is a deductive consequence that always under such circumstances gunpowder explodes. And so more generally for the examples that I analysed above. But any scientific explanation can be easily re-expressed in terms of the SPL account. On an SPL account the cause is the substance or substances involved in what the other accounts treat as the events constituting the initial conditions, having certain properties—non-causal and causal (the powers to cause effects, described in the 'laws of nature' and liabilities to exercise those powers under the circumstances described in the 'laws of nature'). The cause is the gunpowder together with the surrounding air, with their properties—non-causal (their actual temperature, pressure, and humidity) and causal (the power to explode, and the liability to exercise that power under the conditions of temperature, pressure, and humidity of the substances stated in the 'law'). It is then a deductive consequence of the existence of the gunpowder and air with these properties that the gunpowder will explode. The gunpowder explodes when and because it and the air come to have the actual temperature, pressure, and humidity that they have. And so more generally for the examples that I analysed above. The different accounts of scientific explanation thus arrange the factors that scientists recognize as involved in scientific explanation in different ways; the same factors are involved on all accounts.

It is generally agreed that one or other of these accounts is the correct account of the operation of laws of nature and their relation to causation in the inanimate world. But in the previous chapter I presented a somewhat different account of 'personal explanation'. Persons are substances, and when they cause events intentionally they cause them by having intentions—that is, by performing causally basic actions in the way analysed in the previous chapter. Persons have basic powers, and

different persons may have different basic powers from each other—some humans can pronounce 'th' (in the way native English speakers pronounce it), and some cannot; some agents can waggle their ears and some cannot. When a person intentionally causes an event by an instrumentally basic action, he brings it about by forming an intention to bring it about (a causally basic action), causing its occurrence. When a person brings about some event *E* by the intentionally basic action of bringing about some other event *F*, he performs thereby an instrumentally non-basic action. In this case he has the intention to bring about *F*, and the belief that *F* is a consequence of *E*, which together cause him intentionally to bring about *E*. Personal explanation explains the occurrence of events in terms of persons, their powers, beliefs, and intentions.

Now, whatever may be the correct account of causation in the inanimate world. the exercise of intentional agency (basic or non-basic) is not to be analysed as an event in the agent, a brain state, or a mental state such as a desire with which the agent finds himself, causing an effect in virtue of some law of nature. For such a state might cause some bodily movement without the agent intending the movement to happen, and then it would not constitute an intentional action. Performing a causally basic action (that is, trying) just is exerting causal influence. I could not try to do any action, basic or non-basic, unless I believed at the time that my trying was causally influential, even though it might not be in the end effective because other partial causes necessary for the effect were not in the right state. I could not try to lift a weight that I am holding in my hand unless I believed that what I was doing was making some difference to whether or not the weight would be likely to rise into the air—even if I were not in the end to succeed, because the weight is heavy, and my muscles are flabby. And in order to believe of any trying that it is making a difference, I have to believe this of the basic tryings—that is, the causally basic intentions, by means of which I try to do other things. If someone really believed that their basic tryings never have any causal influence, there would be nothing they could do that would constitute trying; and so they would cease to try, and so cease to act. Given the principle of credulity (see Chapter 2), we should believe things are as they seem to be—that is, as we believe they are, in the absence of counter-evidence. To believe some proposition is to believe that the proposition is more probable than not, and so an agent cannot believe that he has counter-evidence sufficient to make his belief improbable. It follows

from the fact that, when each of us has the intention to do some action, necessarily he believes that he is exercising causal influence that—given the cooperation of other causes—will make it more probable that he will succeed in doing that action (for example, bring about the intended effect), that he must believe (at the time of having an intention) that probably that intention (that trying) is an exercise of causal influence.

A person causes events in virtue of his intentions, beliefs, and powers, whether or not other persons cause the same effect under similar circumstances. This kind of causation, which I call 'intentional causation', is not reducible to any account of causation that derives it from laws of nature, such as the regularity or RBU accounts. For on the latter accounts the causes are events; whereas in intentional causation they are substances, and causation—or more precisely exercising causal influence—is an unanalysable relation, and so not analysable in terms of laws of nature. If an account such as the regularity account was the correct account of 'inanimate' causation, then intentional causation would be a very different kind of causation from inanimate causation. Intentional causation is, however, quite similar to inanimate causation as the latter is analysed by the SPL theory. In both cases causation is by substances, and unanalysable. Also in both cases the powers of a substance help to explain its causing an effect, whether or not other substances cause the same effect under similar circumstances. (The behaviour of similar substances does, however, provide evidence about what are the powers of a given substance, and so what effects it is likely to cause.) The only difference between scientific explanation on the SPL account and personal explanation is that according to the former substances exercise their causal powers because they have a liability to do so, whereas in intentional causation substances exercise their causal powers because they have an intention to do so and (often) a belief about how to bring about an intended effect. The similarity between the two kinds of explanation on the SPL account of scientific explanation has the consequence that we get a more unified (and so simpler and so more probably true) world view if we suppose that the SPL account is the correct account of inanimate causation. I will assume in future that it is the correct account. But, even on the SPL account of inanimate causation, intentional causation clearly differs from inanimate causation to some extent.

Sophisticated scientific explanations invoke many laws and previous events described in some complexity, of which it is a somewhat remote consequence that the event or state to be explained occurs. Explanation of astronomical phenomena will often involve not merely the laws of Newton's theory but the laws of electromagnetism, the strong and weak forces (and maybe laws of 'dark energy'), both qualified by the theory of relativity and Quantum Theory, and the positions and velocities of very many stars. Sophisticated personal explanations of the occurrence of some event caused by some person or persons will often involve many different beliefs about how to bring about that event, and the exercise of many different powers. For example, to explain the existence of some handwritten paragraph of the manuscript of this book, we need to say that I caused it to exist because I held a large number of philosophical beliefs and beliefs about how to express these views in sentences intelligible to others, and that I had the power to write the sentences on paper. And to explain the existence of the published book, we would need to invoke the exercise of many different powers by many different persons in the light of many different beliefs.

I shall say that we have a full explanation of an event *E* if the explanation cites explanatory factors that brought about *E*, such that the proposition that they occurred entails the occurrence of *E*. Thus (I put my point in terms of the easier-to-expound concepts of law and initial conditions) Mars being where it is now is fully explained by some initial position and velocity of Mars and Kepler's laws of planetary motion, including the law that all planets move in an ellipse around a point close to the sun. It will be a deductive consequence of the operation of these laws and the initial position and velocity of Mars that Mars is where it is now. If there is a full explanation of some effect, I shall say that the cause causally necessitated the effect. If the explaining factors only make the occurrence of the event to some extent more probable than it would be otherwise, I shall say that we have only a partial explanation. In the latter case there is still something brute and ultimate, and so unexplained about the occurrence of *E*. (It should be added that, although there may exists a full explanation of some event *E*, since full explanations have a complicated structure, someone who 'explains' the occurrence of *E* may not mention explicitly all elements of a full explanation of *E*.) The factors involved in a full explanation may themselves be explained. We can explain why Mars occupied its original position and

had the velocity it did, by it having some earlier position and velocity; and we can explain the operation of Kepler's laws (which concern only planets) by Newton's three laws of motion and his law of gravitational attraction.

But, while intentional causation is causation of a different kind from inanimate causation, nevertheless there can be a scientific explanation of the factors involved in personal explanation—of our having the basic powers, beliefs, and intentions that we have. And indeed fairly obviously there is at least a partial scientific explanation of our having the powers—basic and non-basic—that we have. In order for a human agent's intentions to have the intended effects, various physical states of affairs must hold and various physical laws must operate. This is, of course, most evident where the actions are instrumentally non-basic actions. For my intention to kill Jones by shooting to be efficacious, there have to operate certain laws of ballistics and Jones has to be in a certain place, and so on. But this holds even for the instrumentally basic actions of humans. If my intention to move my arm is to be efficacious I have to have the basic power to move it, and it is physically necessary that, if I am to have this power, I have to have certain nerves and muscles, and certain laws of neural interaction must operate. And some scientists have the hope that they may be able to explain our having the intentions we do by some brain events that cause them in accord with psychophysical laws. But it seems *logically* possible that an agent could perform certain basic actions by having the power and the intention to do so without there being any physical conditions naturally necessary for his performance. People have given and accepted explanations of human actions in terms of the powers, intentions, and beliefs of humans, for many millennia without knowing anything about any physical conditions that are causally necessary and sufficient for an agent to possess the relevant power, intention, or belief, and often without believing that our intentions, beliefs, and basic powers are fully caused by any physical event. A belief that my intention to move my arm and my basic powers explains the motion of my arm does not entail any beliefs about bones, nerves, and muscles. A personal explanation explains whether or not there is an explanation of why the agent had the intention he did, or of the belief that the action would have certain effects—that is, whether or not his intentions or beliefs had full causes.

But, since it is logically possible for there to be sometimes a scientific explanation of the occurrence and operation of the factors operative in

personal explanation, it should also be logically possible that there is sometimes or always a personal explanation of the occurrence and operation of the factors involved in scientific explanation. The theist holds that there is always such a personal explanation; the doctrine that there is an omnipresent spirit who is the creator of the universe is just such a claim. I will now express it in my preferred way in terms of the powers of substances, and thereby, I hope, make it plausible that it is a logically possible claim. The theist claims that an omnipresent spirit, God, causes the universe to continue in existence by causing substances at each moment of time to cause the subsequent states of the universe, by conserving their powers and liabilities in the ways codified in laws of nature. Now human beings often cause things to cause effects. By releasing the clutch someone may cause his car to move forward, or someone may cause a billiard cue to cause a billiard ball to move, or cause a hammer to cause a nail to penetrate a plank. The theist will, however, wish to add that there is an important difference between divine and human agency in these cases. When a human being causes *X* to cause *Y*, he relies on the operation of natural laws over which he has no control to produce the effect. He does something that by the operation of natural laws causes *X* to cause *Y*. He releases the clutch, which causes the car to move forward because of the arrangement of parts in the car and the operation of natural laws. But the theist holds that God causes the operation of laws of nature—that is, given the SPL account, causes already existing substances to continue to have the powers and liabilities that they do, as an instrumentally basic action. Substances other than God cause effects including causing other substances to come into existence and causing changes in yet other substances. God causes these latter effects as an instrumentally non-basic action by performing the basic action of causing the operation of the laws of nature—that is, by conserving the powers and liabilities of the causing substances.

The theist normally also claims that God sometimes causes mundane events directly, not by causing the operation of laws of nature, but as an instrumentally basic act (which he does by performing the causally basic act of having the intention that those events occur). One example of God doing such a thing would be God causing the existence of the physical universe (that is, the universe in the narrow sense) at the first moment of its existence (if it had one). Another example would be God causing

physical objects to behave in ways that violate laws of nature, that is, on the SPL account giving to substances powers and liabilities to act different from their normal ones—for example, causing some person to have the power to levitate (rise in the air, contrary to the force of gravity, and under the influence of no other physical force) and the liability to do so on some occasion. Human beings do not have the power to bring matter into existence (given that we construe 'matter' in a wide sense that includes energy) or make objects violate laws of nature. It is, however, fairly easy to conceive what it would be like for them to have such a power. If I could just, by so choosing, produce a sixth finger or a new fountain pen (not made out of pre-existing matter) I would have the power to bring matter into existence. Others could see that I had this power by asking me to perform the acts in question. It seems logically possible that an omnipresent spirit could have and exercise far more extensive such powers, including powers to make objects violate laws of nature.

Clearly the theist holds that, when God causes some event, there is no scientific explanation (or any explanation in terms of the agency of some other person) of the existence and operation of the factors involved in the personal explanation of the occurrence of that event. These factors are the person, God, his intentions, powers, beliefs. That God has the powers that he does is a consequence of his omnipotence; that he has the beliefs that he does is a consequence of his omniscience. I shall analyse omnipotence and omniscience in the next two chapters. They are properties that belong to God's nature. We shall see later in this chapter how the theist holds that God is free in the sense that no other causal factor, such as a state of the world or a law of nature, in any way influences the intentions on which God acts. We shall see in a subsequent chapter how the theist holds that the existence and nature of God cannot be explained by anything more ultimate. (I shall, however, consider in a later chapter whether God's existence at one time can be explained by God's existence at another time).

Permitting (or allowing) is a species of causing. As I shall use these terms, God 'permits' or 'allows' a substance S to cause an event *E*, if he causes S to have the power to cause *E* and causes it to be the case that nothing causes S not to exercise that power. An example of God permitting some substance to cause some event might be his permitting one human intentionally to kill another one (by the exercise of that human's free will). I, like God, may allow one person S to kill another person R, by

giving S a gun and telling him where R is. But what I do will allow S to kill R only if it is not ruled out by laws of nature that S will kill—it may be that S does not have the power to go to R's location, or that S's brain causes him not to have the intention to kill; and whether he has that power or his brain causes him not to have that intention depends (at least in part) on what are the laws of nature. Natural laws of the right kind independent of humans must operate if humans are to permit things to happen. God is not, in the theist's view, dependent in this way on the operation of natural laws independent of himself—because he causes and can set aside the operation of the laws of nature. Events happen just because he allows them—nothing independent of himself need operate for his permission to be efficacious.

Free Action

The theist believes that everything that God causes fully (that is, without the effect depending also on the non-determined action of some other agent), he causes intentionally. The theist also normally holds that all God's actions are free. What does it mean to say of God that he acts freely or of his own free will? There are considerable disputes about what it is for a human being to act freely, which I shall need to discuss very briefly in Chapter 10. But it seems to me clear that what is normally meant by the claim that God acts 'freely' is that nothing causes, or even causally influences, God to do what he does. He does what he does because he chooses to do it, and nothing causes God to make the choices he does. But clearly theism does not hold that God makes random choices. So we must understand this claim, as compatible with God being influenced by reason; God sees what doing each particular action involves, and is influenced by that in choosing what to do. Hence this claim is to be understood more precisely as the claim that no non-rational causes act in or on God, influencing him to do what he does. Nothing apart from any reasons there might be for doing it influences him to create the world, or to keep the laws of nature operative, or to do anything else that he does.

By contrast, we humans are obviously influenced to do what we do by many causal factors (as opposed to reasons) over which we have no control, factors that act upon us as it were from without. The state of our body makes us tired or hungry, and so strongly influences us towards making choices that will allow us to rest or eat. The tired prisoner, told

that he will be allowed to sleep if he confesses to a crime, is much more inclined to confess than he would otherwise be. Such causal factors 'influence' or 'incline' or 'pull' us towards doing one action rather than another. It is in such situations that humans suffer temptation. Their reason tells them that *A* is what they ought to do, but their body 'pulls' them as it were towards not doing *A*. Yet, on the normal Judaeo-Christian understanding of God, no causal factors influence God. A person who is not influenced in his choices by any (non-rational) causal factors I will call a perfectly free person. Theism claims that God is 'perfectly free' (in this sense).

So I understand the claim of theism that there is an omnipresent spirit who is perfectly free and is the creator of the universe as follows: there is a person *P* who is an omnipresent spirit and intentionally causes or permits all events that happen (apart from any that are entailed by his own existence); and no (non-rational) causal factor in any way influences *P* to form his intentions. I understand Aquinas's claim, cited in Chapter 7, that God 'exists in everything causing their existence' as involved in the claim that God causes or permits all the events that happen, and that he does not do so by relying on any factor independent of himself and so not by acting at a distance from the events that he causes. As analysed so far, the difference between this spirit and human persons is simply a matter of degree, and lack of kinds of influence to which the spirit is subject. The degree and spatial range of our causal influence and knowledge is very limited, his is vast; he is not subject to irrational influences, we are. That it involves such differences of degree and lack of influence from ourselves is surely not enough to make the supposition of the existence of such a spirit logically impossible. And, as in the previous chapter, since all the words I have used to refer to properties, of which 'causing', 'universe', and such like are informative designators, it follows that, if the claim is logically possible, it is also metaphysically possible, and so coherent.

Freedom and Reason

Now, to do an intentional action, as I am using the term, is to do something, meaning to do it. If a person does something meaning to do it, he must have an intention or purpose or reason for doing the action. For clearly, if someone does A meaning to do it, either he does

A to forward some further purpose or he does not do A to forward some further purpose. In the latter case, since he means to do A but does not do A to forward some further purpose, he must be doing A for its own sake; his ultimate intention is to do A. If someone says that he did something 'for no reason at all', the natural interpretation is that he did the action merely for the sake of doing it, not for any further reason. It does not seem logically possible that someone should perform some action intentionally, without having any reason at all for doing it. Now having a reason for an action consists in regarding some state of affairs as a good thing and the doing of the action as a means to forwarding that state, and hence itself a good thing. If my reason for going to London is to meet Jones, I must regard it as in some way a good thing that I should meet Jones, and so in some way a good thing that I go to London. If I regard it as in no way a good thing that I should meet Jones, if I regard my meeting Jones as an event that would serve no useful function at all, meeting Jones cannot be my reason for going to London. The point that to do an action the agent must (of logical necessity) see her performance of it as in some way a good thing is a very old one due to Aristotle, emphasized by Aquinas, and re-emphasized in recent years by, among others, Stuart Hampshire.[12] God, like humans, cannot just act. He must act for a purpose and see his action as in some way a good thing. Hence it is not logically possible that God should do what he does not believe to be in some way a good thing.

So a person has to have some reason if he is to do an action *A*. Can a person still do action *A* even if he believes that he has an overriding reason for refraining from doing *A*? What are we to make of the suggestion that someone might see doing *A* as a good thing in one way (for example, by its giving sensual pleasure to himself), see refraining from doing *A* as a good thing in another way (for example, by its contributing to the lifelong peace of mind of someone else), see refraining from doing *A* as overall a better thing than doing *A*, but nevertheless do *A*? When it is suggested that a case is of this sort, we may well suspect that it is not, that the person did not really see refraining from doing *A* as overall a better thing than doing *A*. Yet we are sometimes prepared to

[12] 'A man cannot be sincere in accepting the conclusion that some course of action is entirely mistaken, if he at the same time deliberately commits himself to this course of action' (Stuart Hampshire, *Freedom of the Individual* (Chatto and Windus, 1965), 7).

allow that the situation is as suggested. We do seem to allow the possibility that someone might do an action that he regarded as a good thing only in some respect but on balance a bad thing. But, although we allow this possibility, we do feel that some further explanation is called for. If someone really does believe that to refrain from doing *A* would on balance be better than to do *A*, and so accepts that he has overriding reason for refraining from doing *A*, he believes that he has adequate reason for refraining from doing *A* but inadequate reason for doing *A*. Rational considerations point clearly in one direction, and yet the agent goes in the other direction. We could not understand a person who claimed to acknowledge 'overriding reason' for refraining from doing *A* rather than doing *A* and also claimed to be uninfluenced by anything other than the reasons that he acknowledged, and yet did *A*. For, if the latter claim is taken at its face value, what on earth can the agent have meant when he said that he acknowledged 'overriding reasons' for refraining from doing *A*? Not what we normally mean, for normally to acknowledge a reason for doing something is to acknowledge some inclination to do that thing.

So to say of someone that he acknowledges that he has overriding reason for refraining from doing (or for doing) action *A* is to say that, in so far as no factors other than reasons influence him, he will refrain from *A* (or do *A*, as the case may be). If you said that you recognized that overall it would be better for you to go home rather than to go to the cinema, and then you went to the cinema, we should have to suppose either that you were lying or had changed your mind, or that factors other than reasons influenced what you did. An explanation of your behaviour is needed, not only in terms of what you believed about the relative merits of the actions, in terms, that is, of reasons; but also in terms of desires (inclinations to do some act with which one finds oneself, stronger than the inclinations arising from the reasons that one recognizes for doing it), which led you to do what you did not recognize adequate reason for doing. If someone has a strong sensual desire (for example, for food or rest) or a strong desire to be approved by his peers, or a strong feeling of anger, it makes sense to suppose that he judges that overall it would be better to refrain from doing *A* than to do *A* but nevertheless intentionally does *A*. Such non-rational factors over which the agent does not have control explain 'weakness of will', someone acting 'against his better judgement'. But it is not logically possible

that someone might see refraining from *A* as overall better than doing *A*, be subject to no non-rational influences inclining him in the direction of doing *A* and nevertheless do *A*.[13]

It therefore follows that a perfectly free agent will never do an action if he believes that it would be overall better to refrain from doing it than to do it—that is, that overall it is bad; he will always do an action if he believes that overall it is the best action to do, that is better than any incompatible actions (including refraining from doing any action) that he has the power to do. But, of course, this understanding of 'perfect freedom' is paradoxical, since it has the consequence that a perfectly free person is more limited in his choices than one who is subject to non-rational influences and therefore able to yield to them and do actions that he regards as bad. An alternative natural alternative definition of 'perfect freedom' is one that defines a person as 'perfectly free' if he is able to choose to do (that is, can have the intention to do) any action that he has the power to do. This alternative definition does, however, have the consequence that the choices of a perfectly free person may be influenced by desires that he regards as non-rational and that may lead him to act against his better judgement.[14] But, since traditional theism understands God as being subject to no such non-rational influences and also 'perfectly free', and I am seeking to investigate the coherence of traditional theism, I shall understand perfect freedom in the former way—that a person is 'perfectly free' iff his actions are governed by reason alone.

This natural understanding of being governed by reason alone in how he chooses would suggest further that, if a perfectly free person believes that overall there are two or more equally good actions better than any

[13] The extreme position on this issue of R. M. Hare as represented in *Freedom and Reason* (Oxford University Press, 1963), ch. 5, seems to be that necessarily, if someone believes that *A* is the better action, he will do *A* unless it is psychologically impossible for him to do *A*. Many writers have opposed this position. Steven Lukes has pointed out that ordinarily we describe situations in ways that conflict with this principle. We describe people as tempted and yielding to temptation when there is no *irresistible* temptation for them to yield to. On Hare's account of moral action, it follows that it would never be appropriate to blame someone for not living up to his principles. See the contributions of Hare, Lukes, and others published in Geoffrey Mortimore (ed.), *Weakness of Will* (MacMillan, 1971).

[14] Thus Anselm argues that the more God possesses 'the power of doing or experiencing what is not for his good, or what he ought not to do . . . the more powerful are adversity and perversity against him' (*Proslogion*, 7, trans. S. N. Deane (Open Court Publishing Co., 1903)).

other incompatible actions available to him (that is, two or more equal best actions), he will do one of them, although reason does not dictate which one. God might have had a choice of whether to make the planets of the sun to revolve around the sun in a clockwise direction or in an anticlockwise direction (relative to some specified frame of reference); but there would seem to be no reason for him to make one choice rather than the other, and a God sensitive to the relative goodness of actions would surely have seen that. Likewise he might have had the choice of causing me to be born at the exact time at which I was born, or—alternatively—one minute later; again, he would seem to have had no reason for making one choice rather than the other. In such cases God, governed only by reason, will not be governed at all in how he chooses. Neither reason nor non-rational influences will determine how a perfectly free person will choose in the situation where there are, he believes, two or more equal best actions available to him.

Further, a perfectly free person may have before him on some occasion a kind of choice not available to humans, a choice between an infinite number of incompatible actions of some kind, each of which he believes to be less good than some other such action, when he also believes that it is a best action to do some action of that kind than to do no action of that kind. Thus it may be that God believes that it is a best action to create some humans rather than none; and he also believes that the more humans he creates the better. (He may believe that he can create an infinite number of habitable planets, and so place humans on planets in such a way that they do not live in crowded conditions.) So inevitably God will create some humans, but, whatever number he creates, the action of creating only that number of humans will—he believes—be less good than some incompatible action of creating a greater number. Then reason does not dictate which such action he will do (that is, how many humans he will create.) In such a case a perfectly free person must choose between alternatives on grounds other than rational grounds. Despite what seem to me these rather obvious points about the availability to God of many choices of which there is no best, many philosophers, of whom the best known is Leibniz,[15] seem to assume that there is a 'best of

[15] Leibniz's *Theodicy* was designed to show that this world was the 'best of all possible worlds'. He denied, however, that it followed that 'God is not free'. He claimed that, on the contrary, 'it is true liberty, and the most perfect, to be able to use one's free will for the best'

all possible worlds', and so that a God who is perfectly free (in my sense) and also knows the moral status of actions (for example, which are good and which is best)—an issue to be discussed in subsequent chapters—has no choices to make; there is always a best action available to him, and he will do it. I hope that these quick points suggest fairly clearly that frequently there can be no unique best action available to God.[16]

It may be also that some of the actions available to a perfectly free being that he believes it good to do fall into incompatible kinds such that it would be better to do some action of one of these kinds than to do no action of any of these kinds, but there is no best kind of action. Then, if there are, he believes, equal best kinds of action available (that is, more than one kind of action, such that it is better to do some action of one of these kinds than to do any action of some different incompatible kind, but that it is not better to do some action of one of these kinds than to do any action of any other of these kinds), reason dictates only that he will do an action of one of these kinds (but only if there is a best action of the kind he chooses does reason dictate which action of the kind he will do). It may, however, be that there is before God a choice between an infinite number of incompatible kinds of action, such that for each kind it would be less good to do any action of that kind than to do some action of an incompatible kind; in that case, reason does not dictate which kind of action he will do, and if—he believes—there is no best action of whichever kind he chooses to do, reason does not dictate which action of that kind he will do. Thus it may be that there are an infinite number of possible species of animals that he could create, and—he believes—it would always be better to create more species than fewer—better to create some tigers as well as lions than just to create any number of lions, better to create some pumas as well as lions and tigers and pumas than just to create any number of lions and tigers, and so on *ad infinitum*. Then, however many species he creates, it would always—God believes—be better if he created more species. In that case, reason does not dictate

(see the *Abridgement to the Theodicy*, in Leibniz, *Selections*, ed. and trans. Philip Wiener (Charles Scribner's Sons, 1951), 520.) Aquinas, by contrast, held that this world was not the best of all possible worlds: 'God could make other things, or add other things to those he has made, and there would be another and better universe' (*Summa Theologiae*,Ia.25.6.ad.3).

[16] I discuss in Chapter 11 the objection by Rowe that, if a being cannot in every situation do a unique best action, that being cannot be perfectly good, and so for this reason there cannot be a perfectly good God.

how many species he will create. And, if there is, for some or all species that he chooses to create, no best number of animals of that species that—he believes—it would be best to create, again reason does not dictate what he will do. So, in summary, if God is a perfectly free person (in my preferred sense), he has the freedom to choose which action to do only when he believes that there is not a unique best action within his power; and that might well—for all humans can tell—be (for all the various reasons just analysed) God's normal situation. But what he will do when he believes that there is a unique best action constitutes a logical limit on the freedom of a perfectly free person.

9

Omnipotent

Initial Attempts at a Definition

God, the doctrinal definitions of the Christian Church often affirm, is 'omnipotent' (*omnipotens* translating παντοκράτωρ), which is naturally interpreted as meaning 'has power over everything' or 'can do anything'. The aim of this chapter is to reach a definition of what it is for a person to be 'omnipotent'at some time *t*, which analyses as much as possible of what Christians, Jews, and Muslims have meant by the claim that God is 'omnipotent', such that it is logically possible that there be an omnipotent person (who is also an omnipresent spirit, perfectly free, and creator of the universe.) Many modern philosophers, following earlier patristic and medieval philosophers,[1] have struggled to provide a satisfactory definition of omnipotence that elucidates their intuitive beliefs about the extent of the power that theists have sought to ascribe to God. In the belief that none of them has reached an entirely satisfactory definition, I shall try to do better.

If we understand being 'omnipotent' as 'having power over everything', that in turn is naturally understood as 'being able intentionally to cause any event'; and, if we understand it as 'can do anything', that in turn is naturally understood as 'can do any intentional action'. But, since all actions consist in causing events distinct from the action of causing them, apart from actions of trying to cause an event, and since anyone, however weak, will always succeed in trying to cause some event (if someone tries to try, necessarily she succeeds in trying), we need not concern ourselves further with acts of trying. What distinguishes

[1] For a brief history of patristic and medieval accounts of omnipotence, see Brian Leftow, 'Omnipotence', in T. P. Flint and M. C. Rea (eds), *The Oxford Handbook of Philosophcal Theology* (Oxford University Press, 2009).

powerful persons from others is that they can cause more events that are distinct from the action of causing them. Given that, the two ways of understanding omnipotence are equivalent. Similar difficulties arise with both approaches, but most recent writers on omnipotence have found it more satisfactory to work within the former approach in order to resolve them, and I will do the same.

The obvious first difficulty with defining omnipotence as the ability to cause any event is that it seems to require an omnipotent person to be able to cause logically impossible events such as me-existing-and-not-existing-at-the-same-time. So, since it is fairly obviously inconceivable to suppose that anyone could cause logically impossible events, it is natural to suggest that we say that a person is omnipotent iff he is able to cause any logically possible event. Despite the (to my mind) fairly obvious inconceivability of someone being able to cause a logically impossible event, some thinkers have objected that, in order to be truly omnipotent, a person should be able to cause not merely the logically possible, but the logically impossible as well. This objection is, however, misguided. It arises from regarding a logically impossible event as an event of one kind on a par with an event of another kind, the logically possible. But it is not. A 'logically impossible event' is not an event, just as a dead person is not a person. It is something described by a form of words that purport to describe an event, but do not describe anything that it is conceivable to suppose could occur, since the sentence that says that it occurred entails a contradiction. It is no objection to the omnipotence of some person that he cannot make a square circle. This is because 'a square circle' does not describe anything that it is logically possible could occur.[2]

[2] This point was recognized by Aquinas. He wrote that 'it is incompatible with the meaning of the absolutely possible that anything involving the contradiction of simultaneously being and not being should fall under divine omnipotence. Such a contradiction is not subject to it, not from any impotence in God, but simply because it does not have the nature of being feasible or possible. Whatever does not involve a contradiction is that realm of the possible with respect to which God is called omnipotent' (*Summa Theologiae*, Ia.25.3.) Descartes is often supposed to have claimed that necessary truths are made necessary by the will of God, and that God could have made the truths that he made necessary to be instead impossible, and vice versa. For citations from Descartes and somewhat different interpretations of what Descartes was claiming, see Harry G. Frankfurt, 'Descartes on the Creation of Eternal Truths', *Philosophical Review*, 86 (1977), 36–57; and E. M. Curley, 'Descartes on the Creation of the Eternal Truths', *Philosophical Review*, 93 (1984), 569–97.

However, there are clearly logically possible events that it is not logically possible that anyone could cause, in particular an 'uncaused event'; and other events that it is not logically possible that anyone except a particular person could cause, such as 'an event not caused by S'. So in order to rule out an omnipotent person being required to cause such events, it is natural to suggest the following simple definition of omnipotence at a time *t* as:

> [α] S is omnipotent at a time *t* iff S is able at *t* to cause any event *M* that it is logically possible that he could cause at *t*.

I understand 'is able to' as entailing 'knows how to'. So [α] requires that, to be omnipotent, S has both the power and the knowledge of how to cause *M*. Erik Wielenberg has defined a person as 'omnipotent' in such a way that any person who is sufficiently powerful is omnipotent, and he explicitly denies that a being could lack omnipotence simply because he lacks the knowledge of how to cause some effect.[3] But, although etymology might suggest that being 'omnipotent' is merely a matter of having enough power, I think that hardly anyone in a monotheistic tradition would count a person as omnipotent if he did not know how to cause some effect that was within his power to cause—for example, if he was unable to talk to Adam because he did not know where Adam was.

Unfortunately definition [α] runs into the 'McEar' objection.[4] McEar is a being who essentially (that is, of logical necessity) can do no action except scratching his left ear; so long as he can scratch his left ear—that is, cause his hand to scratch his left ear—he comes out as omnipotent on this definition—which is absurd. And in different ways several definitions have fallen foul of the McEar objection.[5] So, instead of 'logically possible that he cause', some have substituted 'logically possible that

[3] Erik Wielenberg, 'Omnipotence Again', *Faith and Philosophy*, 17 (2000), 26–47.

[4] 'McEar' was introduced into modern discussion by Alvin Plantinga (see his *God and Other Minds* (Cornell University Press, 1967), 170). T. P. Flint and A. J. Freddoso ('Maximal Power', in A. J. Freddoso (ed.), *The Existence and Nature of God* (Notre Dame University Press, 1983), 109 n. 4) refer to prior medieval awareness of a McEar-type objection.

[5] Those of myself ('Omnipotence', *American Philosophical Quarterly*, 10 (1973), 231–7), Edward Wierenga (*The Nature of God* (Cornell University Press, 1989), 25), Flint and Freddoso ('Maximal Power'), and Wielenberg ('Omnipotence Again') have all been accused—in my view, correctly—of being open to a variant of the McEar objection. For this criticism of myself, see Flint and Freddoso ('Maximal Power', 112 n. 23); for this criticism of Wierenga, and of Flint and Freddoso, see Wielenberg ('Omnipotence Again', 31, 36); and for this criticism of Wielenberg, see Leftow ('Omnipotence', 185).

some being cause',[6] and then the essence of an individual ('McEar') is not involved in the definition. This suggests:

> [β] S is omnipotent at a time t iff S is able at t to cause any event M which it is logically possible that some being cause at t.

However, both definitions [α] and [β] are unsatisfactory in not elucidating which actions of causing logically possible events are logically possible.[7] In order to provide such a definition, we need to take a stance on two issues about time.

Periods and Instants of Time

The first issue concerns the relation between events occurring at instants of time and events occurring over periods of time. One theory that I shall call the I-theory, which seems to be assumed unthinkingly in many definitions, is that an event can take place at an instant of time, independently of what happens over any period of time. The rival theory, which is the one I defend and which I shall call the P-theory, is that all talk about an event happening at some instant can always be analysed more fundamentally in terms of what happens over a period or periods of time. I avoided this issue in earlier chapters and in definitions [α] and [β] by referring simply to a 'time t' without saying whether 't' was meant to refer to an instant or a period.

The normal sense of 'instant', made precise in mathematics, is as designating a zero-dimensional boundary to a one-dimensional period of time. Talk about an event beginning or ending at an instant is analysable as the event lasting for a period of which that instant is the initial or terminal boundary.

[6] In quoting various recent authors I have substituted 'cause' for their 'bring about', since they use these expressions in the same sense; and I have substituted 'logically' for 'metaphysically' in any claims about metaphysically possible/impossible/necessary events or substances, for the reasons given at the end of Chapter 3.

[7] Leftow's own definition (in 'Omnipotence') of a being being 'omnipotent' at a time t has a clause '(i) it is not the case at t that there is some event S is unable to cause at least partially due to lack of power', as well as a clause very similar to [β]. His reason for adding clause (i) is that otherwise S might be able to cause any event, but some events only with difficulty; and an omnipotent being needs to be able to cause any event without difficulty. But if S cannot cause M without difficulty, that—I suggest—entails that he cannot cause it immediately, and so not at t. But, if I am mistaken about this entailment, the phrase 'without difficulty' needs to be added after 'is able' in [β] and all subsequent definitions.

In general our ascription of properties to objects is ascription to them over periods of time—things are green or wet or weigh 10lb for periods of time. And normally, when we do ascribe properties to objects at an instant (e.g. 2 p.m.), this is analysable as ascribing them to objects for a period divisible into two smaller periods, one bounded terminally and the other bounded initially by that instant (2 p.m.). It is difficult to see what would be meant by an object being green at 2 p.m. although it was not green either before or after 2 p.m. It would be green for a period of zero duration, and how could that differ from its not being green at all? Certainly, things like winning a race or becoming 60 years old happen at an instant. But one becomes 60 at an instant iff that instant is the terminal bounding point of a period of sixty years during which one has lived. And one wins a race at a certain instant iff one has run it for a period ending at that instant, and there is a final segment of that period (however small) during all of which one is ahead of the field. The same applies to talk in a scientific context of instantaneous possession of a property by an object, when the object does not possess that property before or after the instant in question. Such talk is introduced by a special definition in terms of limits. We say that a particle has an instantaneous velocity of 10ft/sec. at 2 p.m. iff, as we take smaller and smaller periods of time beginning at 2 p.m. and measure the velocity (ratio of distance covered to period of time) over those periods, it gets closer and closer to 10 ft/sec.; *and* also, as we take smaller and smaller periods of time ending at 2 p.m., and measure the velocity over those periods, it gets closer and closer to 10 ft/sec. But, since 'instantaneous velocity' is introduced by such careful mathematical definitions, the obvious thing to say is that that is what instantaneous velocity is. It is not a velocity possessed at an instant discovered via a study of limits, but rather a limit of velocities possessed over series of periods bounded by that instant. That that is the right thing to say is brought out by the fact that, where velocities from before an instant converge on a different limit from velocities after that instant, not merely does physics not ascribe an instantaneous velocity, but it provides no grip as what would be meant by a claim about it.

No mundane phenomenon requires us to postulate that there is a sense of 'instant' in which an event can happen at an instant, which is not analysable more fundamentally in terms of what happens over periods. And it seems difficult to understand what it would mean to say that an event happened at an instant without that entailing anything about the

period that begins or ends with that instant or is composed of periods that begin or end with that instant. It seems an ungrounded assumption to postulate that there is a sense of 'instant' in which this does have a meaning; and I cannot see why talk about God needs to postulate that.

Note that an advocate of the I-theory normally treats periods as literally 'consisting of' instants; and so needs to make a distinction between instants that form internal boundaries of periods and instants that form external boundaries of periods. An internal bounding instant is the first or last instant of a period bounded by it, whereas an external bounding instant is the last instant before the period begins or the first instant after the period ends. A period may be individuated by bounding instants of either kind. (But, if time is continuous—that is, any period of time, however small, consists of two smaller periods—a period cannot have bounding instants of both kinds.) So, for example, an object could become green at 2 p.m. in two different ways, according to whether it was or was not green at 2 p,m., the bounding instant. On the P-theory, 2 p.m. is simply the common boundary of two periods of time (one when the object is not green, the other when the object is green), and there is no truth about whether or not it is green at that instant.

For these reasons I shall in future assume the P-theory, although my main points can—I believe—be expressed without too much difficulty in terms of the I-theory. I shall also assume that time is continuous; but, again, my main points can—I believe—be expressed in terms of a discrete theory, which claims that time consists of indivisible periods of finite length. Henceforward I use lower-case letters such as '*t*' to refer to instants, and capital letters such as '*T*' to refer to periods of time.

The Direction of Causation

The second issue about time is whether either backward or simultaneous causation is logically possible. The view that one takes on this issue, unlike the view that one takes on the former issue, makes a great difference to one's understanding of omnipotence. Definitions [α] and [β] allow both backward and simultaneous causation. Whether these kinds of causation are possible depends on how we understand causation and temporal succession. I argued in the previous chapter that causation is a relation between a substance and an event (the effect), which cannot be analysed in terms of laws of nature or any other fundamental concept.

We learn what causation is by exercising it (as well as by experiencing its influence on us—for example, when someone is pushing us). Exerting causal influence just is the kind of thing of which we are aware when we try to perform a basic action; and actually causing just is the kind of thing of which we are aware when we succeed in performing a basic action (and which we also come to see at work in the regularities of the natural world). Many of the paradigm instances of causation, as when we perform a basic action, are ones in which the succession cause—effect is experienced as a single event. And, as noted in the previous chapter, this relation as transitive: if a substance A causes a substance B to have a property ϕ, and B is such as to have a liability when having ϕ to exercise its power to cause *E*, then A causes *E*. If I light the gunpowder, and gunpowder is such as to explode when alight, then I cause the explosion. This concept of causation is the concept of 'naturally necessitating' the effect, bringing it into existence, when it was not in existence when we were causing it.

It is important to distinguish between the cause, the substance, either a person or an inanimate object, exercising causal power, and it succeeding thereby in producing an effect. That distinction is clear in the case of intentional causation where the agent (a person) having the intention ('trying') is the exercise of causal power, and it having its intended effect is it causing that effect. I pointed out earlier that on the SPL account of inanimate causation, which I am adopting, what the causing substance does is to exert a certain amount of causal influence, which—if the surrounding circumstances are of a certain kind—will produce a certain effect. (Where nothing turns on the distinction between 'causing' and 'exercising causal influence' I shall often—in order to make the exposition easier to follow—ignore it, and just speak of 'causing' when 'exercising causal influence' would have been more accurate. Also, although I have just been describing the operation of causation in what I have argued is the correct way as causation by a substance, where nothing turns on it, I shall sometimes speak of events causing effects, and ask the reader to bear in mind that causation by an event is really causation by a substance exercising some power.)

This account of causation as unanalysable fits naturally with a similar account of temporal succession—that is, with 'temporal succession' in the normal meaning of that expression. (To analyse 'temporal succession' by other allegedly more fundamental concepts, such as 'the direction of

increasing entropy',[8] is to give a quite different meaning from the normal one to the expression 'temporal succession'.) As with 'causation', we understand what the expression means by acquaintance with paradigm examples of its correct application. The primitive source of our grasp of the concept of temporal succession is our experience in a specious present of one event being succeeded by another event—for example, an experience of a flash being succeeded by an experience of a bang; and so such successions form paradigm instances of the concept.[9] Temporal succession—one event being later than another—just is the relation of which we are aware when it holds between our experiences in the specious present. In talking about events in the public world succeeding one another, we are attributing to them the same relation as we experience when we experience one experience being followed by another one. And we also are aware in the specious present of instances of one experience being succeeded by a second experience, and this by a third experience, and, since they are also instances of the first experience being succeeded by the third experience, we come to understand the concept of temporal succession, like the relation of causation, as transitive. Among the pairs of events that occur in a specious present are those that provide, according to my account of causation, paradigm instances of causation—our intentions being followed immediately by the intended bodily movements ('immediately' in the sense that the cause begins before the beginning of the effect, and continues during the effect).

With these understandings of causation and temporal succession, I come back to the issue of whether simultaneous[10] or backward[11] causation is

[8] 'A process is in the direction of positive time if it is in the direction of the entropy of branch systems' (J. J. C. Smart, *Philosophy and Scientific Realism* (Routledge and Kegan Paul, 1963), 146). Various physicists and philosophers have offered similar kinds of definition.

[9] See Additional Note A.

[10] Most philosophers seem to allow the possibility of simultaneous causation. Immanuel Kant (*Critique of Pure Reason*, B248) justified his claim that 'the great majority of efficient causes are simultaneous with their effects' by means of examples of purported simultaneous causation, without giving any argument to show that they were not examples only of (at most) very fast forward causation; his least plausible example was 'the stove, as cause, is simultaneous with its effect, the heat of the room'. David Hume (*A Treatise of Human Nature*, I.2.3) claimed that 'the priority of time in the cause before the effect' is a relation 'essential to causes and effects', but he admitted that this principle is 'not universally acknowledged' because some thinkers allowed the possibility of simultaneous causation.

[11] Some modern physicists entertain the physical possibility of backward causation, and so do some modern philosophers of physics—e.g. Huw Price (*Time's Arrow and*

logically possible. Given the P-theory, simultaneous causation is to be understood as a substance exercising its causal influence over exactly the same period of time as the effect that it causes, and backward causation is to be understood as a substance beginning to exercise its causal influence after the beginning of the effect that it causes. I now introduce three connected concepts. By an event occurring at a (period of) time *T* being *fixed* at a time *T**, I mean that it is such that of logical necessity no agent, however powerful and however hard he tried at *T**, could cause any part of that (whole) event not to occur at *T*. As I noted earlier, one may cause an event *E* by causing another event that in turn causes *E*. A cause that is the most immediate (or direct) cause of an event, and actually brings it (the whole event) into existence, may be said to '*fix*' it. By an event being '*fixable*' at a time *T* I shall mean that the event is such that it is logically possible that a strong enough agent could at *T* have fixed either it or its non-occurrence, whichever he chose, whatever else logically possible might be the case at any other time or timeless moment. Hence every event is fixed at the time at which it occurs.

One could bring any event *E* into existence at a time only by beginning to act at a time that *E* does not exist. So *E* cannot be fixed by a direct cause acting at exactly the same time as *E*. Hence some part of *E* is fixed at any period during *E*'s occurrence. For this simple reason, I suggest, simultaneous direct causation is impossible. That is compatible with some direct cause acting during the first part of the occurrence of some event so as to bring about the second part of that event (or indeed, barring my arguments below, a direct cause acting during the second part of the occurrence of some event so as to bring about the first part of that event.) But what, I argue, is impossible is that a direct cause cause an effect by acting over exactly the same period of time as the effect.

And not merely must the direct cause C of some effect *E* exert causal influence at some time other than when *E* occurs, but it must continue to do so over the whole time while *E* occurs, if C is to fix *E*. For, if C exerted causal influence so as to cause *E* for only a part of the time when *E* occurred, the substance involved in *E* itself or some other

Archimedes' Point (Oxford University Press, 1996)); and so adequate accounts of omnipotence need to take a view on this issue. For discussion of the reasons given by Price and other philosophers for allowing the possibility of backward causation, see my 'Time and Causation', *American Philosophical Quarterly*, 51 (2014), 233–45.

substance could fix the other part of *E*. So, I claim, a substance that fixes an event must exert its influence for a period of time that includes both a time when the event does not occur and the whole time when the event does occur. We can see this principle at work in mundane examples. When a moving billiard ball A hits a stationary billiard ball B and causes B to move, A must be moving as it touches B, and so—given P-theory—for some period ending with the instant at which it touches B in order to transmit its motion, and it will be the direct cause of B's subsequent motion only for the period while it is still in contact with B. After contact is broken, the direct cause of B's subsequent motion is B itself.

Among the paradigm examples of a substance being the direct cause of an event are a person having an intention to cause some bodily movement being followed immediately by a brain event that causes the movement ('followed immediately' in the sense that the effect begins after the beginning of the cause and ends at the same instant as it). In these cases it follows from the argument of the previous paragraphs that some part of the first event (the person having a certain intention) is fixed at a time at which no part of the second event (the brain event) is fixed. And, while most of the successions of temporally overlapping events ending at the same instant of which we are aware are not ones in which, we believe, the first event causes the second event, we derive from the paradigm examples the understanding that a time at which persons can cause an event directly is any time beginning with their exercise of causal influence and ending at the same instant as the event. It follows that, if at the time of the occurrence of the first event we had formed an intention to stop the second event occurring and/or to cause a different event instead and were strong enough, we would have succeeded—for this would be a succession just like the actual ones in which our intentions cause events. It follows that all successions of temporally overlapping events that end at the same instant, not merely the ones of which we are aware, are ones where some part of the event that begins earlier is fixed at a time when no part of the later event is fixed but the whole later event is fixable.

Yet no (whole) event E at a time T_2 is fixable at any time T_0 ending earlier than the end of T_2. This is because, however strong an agent was at T_0, it remains possible that he changes his mind at a later time T_1, beginning at the end of T_0 and ending at the end of T_2, and so stops (some part of) E occurring. Yet, since an agent at any earlier time T_0

could (unless he changed his mind, or was prevented by the act of a stronger agent before the end of T_1) cause what happens at T_1, and thereby what happens at T_2, what happens at T_2 cannot be fixed at T_0. Hence every event is unfixed at every time ending before it ends.

It follows from the previous arguments that no event E at T_2 can be caused directly and so fixed by any agent D acting at a subsequent time. As we have seen, a direct cause of an event E at T_2 must act for the whole time while E occurs, as well as for some further time when E does not occur. In the case of a supposed subsequent cause D, that further time T_3 would be immediately subsequent to E. But only what is fixed can fix some other event; until D's action is fixed, that action cannot fix E. For, while an event is not fixed, an agent F of sufficient strength acting at an immediately earlier time could always prevent that event from happening. So D's action at T_3 could be caused not to occur by an agent of sufficient strength acting at T_2, and then its effect (E) would not happen. So, if it could be fixed by a later cause, E would not be fixed at T_2. But T_2 is the time when E occurs; and, as we have seen, every event is fixed at the time at which it occurs. Hence no event at one time can have a direct cause acting at a later time. Yet, if an event cannot have a later direct cause, it cannot have any later cause. For such a later cause would be connected to the direct cause by a chain of causes, each of which was the direct cause of the next one; and some of these direct causings would be of an earlier event by a later one, and so ruled out by the previous pattern of argument. So backward causation is not logically possible; every event is fixed at all times after it has occurred. In summary and very loosely, since forward causation is always logically possible, backward causation is never logically possible.

It follows that not merely direct simultaneous causation, but also indirect simultaneous causation, are impossible. For, if C caused an event E simultaneous with the act of causing it by directly causing F, which directly caused E, F would have to occur either (1) simultaneously with C's act, or (2) after C's act, or (3) before C's act. (1) is impossible because of the impossibility of direct simultaneous causation; (2) involves backward causation in the respect that F causes E; and (3) involves backward causation in the respect that C causes F. And the same problems arise for any postulated longer chain of causes by which C causes E. Hence the logical impossibility, not merely of all backward causation, but of all simultaneous causation.

Before we can apply these principles, we need an account of what it is for an event to occur at a certain time. Despite the above principles, there are certainly propositions reporting some event purportedly occurring at some time that can be made true or false (wholly or partially) by some later event, where it seems fairly evident that the proposition reporting the purportedly earlier event does not report merely what happened at that earlier time. And it is for this reason that the event reported by the former proposition is not caused by a later event. For example, suppose that John met Mary in 1988 and they got married two years later; then by marrying Mary in 1990 John made it true that 'John met his future wife in 1988'. But it is evident that 'John met his future wife in 1988' is only partly about a meeting in 1988; it is also about what happened at some unspecified later time. While it may seem in general obvious whether or not some proposition purportedly about some time is really totally about that time and so made true or false solely by events at that time, it is desirable to have a definition that makes a clear distinction between such propositions and other propositions that are purportedly about one time but are really (at least partly) about another time and so made true or false solely or partially by events at that other time. Various philosophers have sought to make such a distinction in terms of 'hard' and 'soft' facts. In my view, the definitions that they have offered have not been satisfactory, and I shall now provide what I believe to be a more satisfactory one.[12]

I define an event *E* as a hard event at *T* iff the occurrence or non-occurrence of times before or after *T* is neither logically necessary nor logically sufficient for the occurrence of *E*—given the occurrence of the

[12] This definition that I proceed to give is based on the account of a 'hard fact' at a time, given by William Hasker (*God, Time, and Knowledge* (Cornell University Press, 1989), 81–90), as (in effect) one that has truth conditions independent of whether there is any future time subsequent to that time. This definition and all the other earlier definitions are unsatisfactory for the purpose of discussing the possibility of backward causation, because they constitute a fact and so an event as 'hard' in terms of its relation to events in only one direction of time, and so beg the question about whether hard events can be caused by what happens later. For detailed discussion of all other definitions, see my 'Time and Causation', *American Philosophical Quarterly*, 51 (2014), 233–45. My definition in that paper defines an event as 'hard' in terms of its relation both to its past and to its future. I realized subsequently that my own definition in that paper needed further refinement, and I have tried to provide that here. My definition will, of course, for any *T*, capture far fewer events as 'hard' at *T* than all the earlier definitions, since it rules out events reported by propositions that depend for their truth value on the existence (or non-existence) of any time before *T*.

other events that occurred at *T*, for the occurrence of which the occurrence or non-occurrence of times before or after *T* is neither logically necessary nor logically sufficient. (To avoid too clumsy a definition, I am counting the non-occurrence of an event of some kind at *T* as an event at *T*.) An event at *T* that is not a hard event at *T* is a soft event at *T*.

I now illustrate how this definition works. Me-having-a pain-at-midday is a hard event at midday, because whether it occurred is logically independent of the occurrence or non-occurrence of any time before or after midday, and given everything else that happened at midday for the occurrence of which the occurrence or non-occurrence of times before or after *T* is neither logically necessary nor logically sufficient. Whether or not there were such times, I could still have had or not have had a pain at midday. Likewise a-world-war-beginning-in-1914 is a hard event at 1914. Its occurrence is independent of there being any time before or after[13], given everything else that happened in 1914, for the occurrence or non-occurrence of which the occurrence of an earlier or later year is neither logically necessary nor sufficient. But John-being-30-years-old-in-1988 is a soft event in 1988, since it is logically necessary for its occurrence that there were thirty years before 1988. Necessarily, if there were no times before 1988, that event could not have occurred. Intuitively John-meeting-his-future-wife-in-1988 is a soft event in 1988. But the occurrence of times before or after 1988 is neither logically necessary nor logically sufficient for its occurrence, for John could have married Mary later in 1988. To get the result that this is a soft event in 1988 we need the clause 'given the occurrence of the other events that occurred at *T*, for the occurrence of which the occurrence or non-occurrence of times before or after *T* is neither logically necessary nor logically sufficient'. For, given what else happened in 1988, including the event of John-not-marrying-Mary-in-1988, the occurrence of times later than 1988 is necessary for the occurrence of John-meeting-his-future-wife-in-1988; and the occurrence or non-occurrence of other times apart

[13] I am assuming that an expression denoting a period (or instant) of time, such as a particular year, picks out the time it does on our current usage, independently of what in fact happens before or after that time. This aspect of our usage is shown by the fact that the names of years (e.g. as '1988' or '1990'), originally given to them on the basis of their supposed distance in years from the year of the birth of Jesus (1 CE) have been retained, despite the current general belief of scholars that Jesus was born a few years earlier than previously believed.

from 1988 is not logically necessary nor sufficient for the event of John-not-marrying-Mary-in-1988. The-beginning-of-the-First-World-War in 1914 is a soft event in 1914, because the non-occurrence of any years before 1914 would be logically sufficient for its occurrence, given the occurrence of a-world-war-beginning-in-1914 (for the occurrence of which, as noted above, neither the occurrence nor the non-occurrence of times before or after 1914 is logically necessary or sufficient.

An event that is not a hard event at a time T may be a hard event at a different time, and in particular at a time that includes T. Thus, while John-meeting-his-future-wife-in-1988 is a soft event in 1988, it is a hard event at the period 1988–90 inclusive; the existence or non-existence of years outside that period makes no difference to whether or not it occurred. With this definition of 'hard event' the impossibility of simultaneous or backward causation is the impossibility that any hard event at T_2 cause any event that is a hard event at T_1 or is a part of any event that is a hard event at any period that includes T_1, where T_1 or any such period is earlier than or simultaneous with T_2. In future, unless otherwise stated, I ask the reader to understand by an 'event at T'a 'hard event at T'.

In arguing for the impossibility of simultaneous and backward causation by showing the logical connections between 'causing' and 'intentional action', 'intention', 'strong', 'try', 'conscious experience', 'past', 'present', and 'future', I have illustrated the claim of R. M. Gale to which I referred in Chapter 4—that the temporal priority of a cause to its effect is not 'a mere convention for the use of words', but follows from the interconnections in a network of concepts by means of which we describe the world. To suppose that a 'cause' could be later than its 'effect' would involve understanding not merely the word 'cause' but many other words in different senses, words that we need to use in their present senses in order to describe the world.

Given the impossibility of both simultaneous and backward causation, we now have the core of a definition of omnipotence that elucidates which actions of causing logically possible events are themselves logically possible.[14] We need to add that to be omnipotent a being does not need

[14] Leftow ('Omnipotence') sees omnipotence as having the 'intrinsic' power to cause events, and distinguishes this from having the 'opportunity' to do so. It is only because of a lack of opportunity that, in Leftow's view, an omnipotent being cannot cause a past event.

to be able to cause a logically necessary event, since the latter will occur, whatever an omnipotent being does. Given that, we can now replace definition [β] by a more satisfactory definition:

> [γ] S is omnipotent throughout some period of time T iff S is able to cause by an act beginning at any instant t during that period any logically contingent [hard] event M beginning at any instant t_1 later than t.

Definition [γ] deals with a problem to which I have drawn attention, but so far not provided a solution.[15] We must not require an omnipotent person S to be able to cause an uncaused event, or one not caused by S. [γ] does not require S to be able to do either of these things, since—given the impossibility of backward or simultaneous causation—neither an uncaused event nor one not caused by S at a period beginning at t_1 is a hard event at that period, since necessarily, if there were no times before that period, every event and so every action would be uncaused, and so not caused by S; the non-existence of every such time entails that any event beginning at t_1 is uncaused. By some prior action S can cause P-causing-that-effect at a period beginning at t_1, since the latter is a hard event at that period. But it follows that, among other events, in order to be omnipotent at t on [γ], S is not required to be able to cause the event of P-freely-causing-that-effect (in the sense of 'freely' in which doing an action freely entails not being caused to do it) at a period beginning at t_1, because that would not be a hard event at that period.

The requirement that an omnipotent person need at any time only to be able to cause hard events enables us also to cope with the difficulty that certain kinds of action are (logically) possible only for certain kinds of person, and being a person of one kind entails not being a person of another kind. For example, an unmarried person S cannot get divorced (immediately, that is). For S to get divorced, he would have first to get married—that is, cause himself to be a married person. A married person cannot get remarried (immediately, that is); he would have first to get

But most theists would count a being as 'omnipotent' only if any inability to act due to lack of opportunity was due to a lack of an opportunity that it was not logically possible for any being to have. I am seeking a definition that elucidates which deficiencies of opportunity are logically necessary.

[15] This definition and the discussion at this point is simpler than the corresponding definition and discussion in my 'God's Omnipotence', in B. Göcke (ed.), *Infinite Properties* (University of Notre Dame Press, forthcoming).

divorced or become an unmarried widow(er). But no person can be both married and divorced-or-an-unmarried-widow(er) at the same time. So there will always be one of these two actions that S cannot do. But in both cases the action consists in bringing about a soft event, S-getting-divorced or S-getting-remarried, events that entail the occurrence of previous events. Hence, if S is unable immediately to bring it about that he is divorced or that he is remarried, that does not count against S being omnipotent.

[γ], however, has the consequence that a person who is omnipotent at one time T could cause any event later than T, and so—if he chose—determine the whole future of the universe thereafter. But, given my earlier arguments, a person could cause an event directly only by acting immediately before its occurrence and continuing to act until the end of the event. And, while he might cause a later event indirectly, whether he succeeded in causing it would depend on what happened in the intervening period; he could ensure that he succeeded in causing it only by continuing to act during that intervening period. He could ensure the occurrence of events later than T only iff he continues to exist and act later than T. So we need a definition of a person being omnipotent at T that limits the power of an omnipotent person to controlling events during the period in which he exercises that power. This consideration leads to:

> [δ] S is omnipotent throughout some period of time T iff S is able to cause by an act beginning at any instant t and ending at any instant t_2, both during that period, any logically contingent event M beginning at any instant t_1 later than t and ending at t_2.

Given [δ], if S exists during T, any universe with its 'laws of nature' exists only because S sustains it, or permits other substances, to do so; and so everything that happens during that period happens because he causes it or permits someone or something else to do so. This entails nothing about what must be the case at any other period. The definition allows a person who is omnipotent until a time T thereafter to cease to be omnipotent. But he could cease to be omnipotent only if he explicitly permitted that to happen—for, being omnipotent, he could always cause his own continued existence (including doing so by preventing any other being causing his non-existence). We are considering what an omnipotent person whose omnipotence includes perfect freedom could do, and—we saw in the previous chapter—a perfectly free person must

do what he believes to be the best action (if there is one). So, unless he believed it to be a non-best action to do so, such an omnipotent person could deprive himself (or allow some other being to deprive him) of his omnipotence or even his existence. If every such action would—he believes—be bad, then any such omnipotent person would be essentially (that is, of logical necessity) omnipotent and forwardly (but not necessarily backwardly) everlasting. (Something is forwardly everlasting iff it will always exist for all future time, backwardly everlasting iff it has existed for all past time.) If, however, some such acts (for example, abandoning his omnipotence while making some other being omnipotent instead) are not non-best acts, then there are still actions that a contingently omnipotent person could do that—if there were such a person—an essentially forwardly everlasting and omnipotent person (that is, a person who of logical necessity is such that, if he exists at all, he always will exist and be omnipotent) could not do. Whether there can be a person who is essentially forwardly everlastingly omnipotent because of any factor other than the goodness of keeping himself in existence with that power is an issue that I shall examine in Part III, together with the issue of whether there could be a person who is essentially backwardly everlastingly omnipotent.

The Paradox of the Stone

Any analysis of omnipotence has to define it in such a way as to be immune to the famous paradox of the stone, designed to show that there (logically) could not be an omnipotent being. The paradox arises when we ask whether God, allegedly an omnipotent being, can make a stone too heavy for himself to lift. If he cannot, the argument goes, then there is an action that God cannot perform—namely, make such a stone. If he can, then there is a different action that he cannot perform—namely, lift the stone. Either way, the argument goes, there is an action that God cannot perform, and so he is not omnipotent. What applies to God applies to any other being, and so, the argument goes, it is not logically possible that there be an omnipotent being. The example of an action that God might or might not be able to perform, lifting a certain stone, is not perhaps a very happy one. One may wonder whether it makes sense to talk of a non-embodied agent, such as God, lifting things. However, a paradox in all essentials the same can be constructed with different

examples in which the action is clearly of a kind appropriate to a non-embodied being. We can, for example, ask whether God can make a universe too independent for him to annihilate. Nevertheless I will continue with the stone example, since so much of the medieval and modern discussion has used this, and, to meet the difficulty, replace 'lift' by 'cause to rise'. I have given my reasons for preferring [δ] to the other definitions so far considered, and so I need to show that it too is immune to this paradox. So here is a more precise statement of the paradox, using definition [δ]. (This statement is slightly simplified in not adding the qualifications necessary to ensure that any effect begins later than its cause. It is easy to insert these qualifications, but only at the expense of obscuring the main force of the argument.)

Where S is any being:

(1) Either S can in any sub-period during *T* cause the existence during *T* of a stone of which S cannot subsequently cause the rising during *T*, or S cannot during *T* cause the existence during *T* of a stone of which S cannot subsequently cause the rising during *T*.
(2) Necessarily if, in any sub-period during *T*, S can cause the existence of a stone during *T* of which S cannot subsequently cause the rising during *T*, then there is at least one logically contingent event during *T* that S is unable during *T* to cause (namely, the rising of that stone).
(3) Necessarily if, in any sub-period during *T*, S cannot cause the existence of a stone during *T* of which S cannot subsequently cause the rising during *T*, then there is at least one logically contingent event during *T* that S is unable during *T* to cause (namely, the existence of such a stone.)
(4) Hence there is at least one logically contingent event during *T* that S is unable during *T* to cause.
(5) If *S* is omnipotent throughout *T*, then S is able to cause the existence of any logically contingent event during *T*. (This is a rough version of [δ].)
(6) Therefore S is not omnipotent throughout *T*.

However, premiss (2) and maybe also premiss (3) are false. If S is omnipotent throughout *T*, S may still be able to cause the existence of the stone. If he does make the stone, he would cease to be omnipotent as soon as the stone exists (and if he is essentially omnipotent, but not

essentially everlasting, he would cease to exist). But he can remain omnipotent for the whole period *T* by not causing the existence of such a stone. For, in that case, there will no logically contingent event that he cannot cause (for events involve substances, and there will be no such substance as the problematic stone, and so no contingent event in which it is involved). Hence (2) is false. Someone may remain omnipotent for ever if he never exercises his power to create stones too heavy to lift, forces too strong to resist, or universes too wayward to control. If, however, S is essentially omnipotent and everlasting, then indeed he cannot cause the existence of the stone. But recall that, by an 'event' occurring during some period, I mean a 'hard' event—that is, one whose truth conditions lie solely within that period. Yet the very existence of such a stone during some sub-period within *T* beginning later than the initial instant of *T* entails the non-existence at any earlier period within *T* of an essentially (forwardly) everlasting omnipotent being, and hence it will not be a hard event whose truth conditions lie solely in that sub-period. Since the same applies to any sub-period within any *T*, a being who is essentially (forwardly) everlasting and omnipotent is not required to be able to make such a stone. Hence, if it is logically possible that S is essentially forwardly everlasting and omnipotent, (3) is also false.

The pattern of argument just used is of the same kind as that used earlier to deal with other objections to the effect that certain kinds of action, such as getting divorced or getting remarried, are (logically) possible only for certain kinds of agent, and an omnipotent person who is of one kind cannot belong to an incompatible kind at the same time.

Omnipotence and God's Free will

I am investigating the logical possibility not just of there being an omnipotent person, but of there being an omnipotent person who is also an omnipresent spirit who is also perfectly free and the creator of the universe in the senses defined in Chapters 7 and 8. We shall see in the next section that being an omnipresent spirit and being the creator of the universe are entailed by the definition of omnipotence that I shall eventually reach. But definition [δ] might seem to allow an omnipotent person to be able to do an action that he believed to be bad, or an action that he believed to be less good than the best possible action (where there is a best possible action); and clearly God is not supposed to be able to do

any such act. We saw in Chapter 8 that God is supposed to be perfectly free in the sense of 'perfectly free' in which a perfectly free person is one subject to no non-rational causal influences; and that a person who is perfectly free in this sense would (necessarily) not do any action that he believed bad or less good than the best. So I need to incorporate into the definition a clause that entails that 'omnipotence' entails not being influenced by non-rational influences, and does not require an omnipotent person to be able to do any action that he could do only if subject to such influences. This is not an arbitrary addition, since a person would not be very powerful if he were subject to strong external influences; and so not unreasonably thought to be all-powerful only if he is not subject to any external or internal non-rational influences. But most discussions of God's omnipotence, including that of Aquinas, assume that not merely can God not do what he believes to be a bad action or one less than the best, but that he cannot do any action that is in fact bad or less than the best.[16] This is summarized by the slogan 'God can do no evil'.[17]

I suggest however that the moral quality, as perfectly good or whatever, of an agent or of action done by an agent at a certain time *T* depends only on whether he does the best in the light of what is knowable by that agent at that time. Thus an agent is morally culpable for doing an action that has bad consequences only if those consequences were

[16] That 'God cannot sin' is included in a long list of things that, Aquinas argues in *Summa contra Gentiles*, 2.25, an omnipotent God cannot do. The things that God is said not to be able to do seem to fall into two groups. In the first group are things that might seem to be logically impossible for any being to do. God cannot, for example, we are told, make 'the past not to have been', or 'make contradictories to exist simultaneously'. We saw that any coherent account of omnipotence must rule out such possibilities. (We are also told that God cannot make 'the three angles of a rectilinear triangle not to be equal to two right angles', which of course we would now regard as well within God's power!) In the second group are things that, although it is logically possible for some being to do, might seem impossible for God to do while retaining his nature (i.e. his other essential properties). My account also has this obvious consequence, and—with exceptions—Aquinas's account of which things these are is compatible with what I have suggested.

[17] Graham Oppy presses the point that the Judaeo-Christian God is pictured not as maximally powerful but as limited to doing what is good. (See his 'Omnipotence', *Philosophy and Phenomenological Research*, 71 (2005), 58–84.) I emphasize that a being could be maximally powerful in Oppy's sense only if it was subject to irrational influences. It is because to say in English that a being is 'omnipotent' might seem to imply that he can do many actions ruled out by traditional accounts of omnipotence, including doing evil, that P. T. Geach preferred to say that God is 'almighty', which he understands as a natural interpretation of παντοκράτωρ. See his 'Omnipotence', *Philosophy*, 48 (1973), 7–20.

foreseeable by him or her at that time. So 'God can do no evil' at time *T* requires, not merely that God does at time *T* only what he believes to be the best, and so on, but also that he has all the knowledge about which actions are the best, good, or bad that he is able to acquire. I shall be arguing in Chapter 11 that there are moral truths to the effect that certain actions are morally good and other actions are morally bad, and that whether a particular action is good (bad, or whatever) depends on the (logically) necessary truths of morality, and on the contingent non-moral truths that determine their application. I ask the reader to take this claim about morality for granted until we reach Chapter 11. It will follow, for example, that whether it is good to give money to some beggar may depend on the necessary truth that it is good to help to feed the starving, and on the contingent non-moral truth that this particular beggar is starving and will use the money to buy food. So, in order to be omnipotent, God needs to have much knowledge (and so true beliefs), not merely of the consequences of actions, but of the moral quality of those consequences.

Among the actions available to a person who is omnipotent in sense [δ], are—for all *p*—the actions of telling humans that *p*. In order to know whether it is good to tell humans that *p*, he needs to know whether *p* is true, as well as any necessary truth about whether it is always bad to give false information—I shall assume that it is always bad. (If someone thinks that it is not always bad, my main point can easily be stated in a more complicated way, so as to take account of this.) So, in order to know whether it would be good to tell humans that Adam did not sin, or that 2 + 2 = 5, he needs to know that is always bad to give false information, and he needs to know that Adam sinned or that 2 + 2 does not equal 5. And, more generally, in order to know what it would be good to tell humans, he needs to know all truths; and, if that is not possible and he is still to be perfectly good, he needs to know all truths that it is logically possible for him to know. These include all necessary truths and all contingent truths about the past, and whatever they entail. These truths will determine to a considerable extent what it is best, good, or bad for him to tell humans, and more generally what is best, good, or bad for him to bring about in future. Among the actions that a perfectly free person who is omnipotent in sense [δ] can do at a time is to promise to bring about some future event *M*. So, given that it is always a best action to fulfil one's promises (and, again, if someone thinks otherwise, my main point can easily be stated in a more complicated way), it follows that such

an omnipotent being who has made such a promise will subsequently believe it to be a best act to bring about *M*, and so will do it. Otherwise he will do what he already knows to be a best or equal best or good action. But, except when there is such a best action to do, he will—given [δ]—not have predetermined his choice and so have a free choice at any time of which actions to do then. In that case it would seem to follow that a person omnipotent in sense [δ] can have infallible knowledge about his future free actions only to the extent to which he knows what would be the best action for him to do in any situation—which may sometimes be because he has made some action the best action (for example, by promising to do it). Plausibly there will often at any *T* not be a unique best action for such a person to do and then he will have a wide choice of actions between which to choose in future.

Further, it may sometimes be that such a person will choose to allow other rational agents (who may or may not be perfectly free) to make free choices (or perhaps—see Chapter 8 note 5—even allow other uncaused events, such as perhaps are the movements of fundamental particles, to occur), and in that case also—I shall argue in the next chapter—he will not know how those agents will choose (or which uncaused events will occur). So, if an omnipotent being has a free choice of which actions to do (including which actions to allow other beings to do freely), omnipotence ought not to be defined so as to require knowledge of all future events.

The knowledge requirement on a perfectly free omnipotent being that he knows at a time *T* everything knowable by him at *T* is therefore to be understood as the requirement that he knows all necessary truths (including necessary moral truths), all events already fixed at *T*, and which actions he will do himself in all possible future circumstances when they are the best to do, including which actions he will allow others to do because it would be the best action for him to allow them to do those actions. For reasons that I shall explain in the next chapter, I need to spell out the requirement that an omnipotent being knows all truths of a certain kind, not—as I have done so far in a loose way—as the requirement that he knows all true propositions of that kind, but as the requirement that he knows *of* all true propositions of that kind that they are true. Expressed in this way, the considerations of the last few paragraphs lead to this final definition of the omnipotence of a being existing in time:

> [ϵ] S is omnipotent during some period of time T iff, in each sub-period within T, S knows of all logically necessary propositions and of all logically contingent true propositions about every time earlier than the beginning of that sub-period and of all the propositions that those propositions entail, that they are true; he is not influenced by non-rational influences; and is able to cause by an act beginning at any instant t and ending at any instant t_2, both during that period, any logically contingent event M beginning at any instant t_1 later than t and ending at t_2, which does not require him to be influenced by non-rational influences in order to do that act.

The clause 'and all the propositions that those propositions entail' captures the requirement that S needs to know which actions he will do himself in all possible future circumstances because they are the best to do, including which actions he will allow others to do because it would be the best action to allow them to do those actions. That these actions are the best to do may be entailed by logically contingent truths about the past, although they are not themselves logically contingent truths about the past—as when some past action determines (via necessary moral truths) which future actions would be obligatory.

I suggest now that definition [ϵ] captures our initial vague understanding of what theists mean by saying that God is omnipotent, if they suppose that God is a temporal God, and I shall assume [ϵ] (for a temporal God) for the rest of this book. I suggest also that I have now crafted a definition immune to the various logical difficulties involved in earlier definitions, and that it is logically possible that there exists a person omnipotent in this sense. The differences between such a person and human persons are in summary simply that, while we have limited powers, he has unlimited powers, and that, while we are subject to irrational causal influences, he is not. I argued in Chapter 8 that postulating a perfectly free person who causes and knows about events at all places, and so one different from humans in the degree of the spatial range of his causal influence and knowledge, and not being subject to non-rational causal influences is not enough to make the supposition of the existence of such a person logically impossible. In going beyond this in postulating that there are no limits, not merely to the spatial range, but to the degree of the power (and knowledge compatible with that) of that person, I am again postulating a difference of degree that is surely not enough to make the supposition of the existence

of such a person logically impossible. In general, if it is logically possible that a substance can have some limited degree of a property, it is logically possible that a substance can have some unlimited degree of that property. We can surely conceive what it would be like to produce (subject to the limitations discussed in this chapter) any effect whatsoever.

Omnipotence and the Other Divine Properties

All the divine properties analysed in the two previous chapters follow from omnipotence in sense [ϵ]. An omnipotent being will clearly be a person. He knows many sophisticated propositions, and so believes them; and he is able to do many basic actions intentionally. But he could not be tied down to acting through a body, and so could not be essentially embodied. He will be omnipresent in the sense that he can cause effects at any place directly by performing a causally basic action (that is, not via doing something somewhere else) and knows what has happened at every place without needing to depend on anything else to acquire that knowledge. He will also be the creator of any physical universe there may be, in the sense that—while he exists—either he causes or he allows some other agent to cause the occurrences of all logically contingent events, including the existence and ceasing-to-exist of all logically contingent substances. Since he knows everything about the past and the intended effects of all his future actions, everything that he causes fully he causes intentionally; and every free action (in the sense of 'free' that entails 'not caused by a prior cause') of others (or other non-determined event) that he allows, he allows intentionally. When we add to the divine properties the property of everlastingness, it will follow that he is the creator of any universe there ever is. It does not follow from the existence of an omnipotent being that he will create a universe, only that, if there is a universe, he is its creator (in the sense defined in Chapter 8).

An omnipotent person will be perfectly free in the sense that, being influenced by no non-rational influences in choosing what to do, he will do only actions that he believes to be the best or equal best or otherwise good, but otherwise has a free choice of which actions to do. I shall argue in the next chapter that it follows also from a person being omnipotent that he will be omniscient in what I shall argue in that chapter is the only coherent sense of omniscience compatible with perfect freedom. It also

follows from [ϵ] that he will have true moral beliefs and so do only actions that are (on the evidence which it is logically possible for him to acquire) the best or equal best or otherwise good. The argument in support of this consequence did, however, depend on a view about the nature of morality—that whether a particular action is good (bad, or whatever) depends on the (logically) necessary truths of morality, and on the contingent non-moral truths that determine their application—for which I shall argue in Chapter 11. I shall also argue there that a being omnipotent in sense [ϵ] is a source of moral obligation—that is, his commands to his creatures, including humans, to do actions impose on them moral obligations to do those actions.

It does not, however, follow from the existence of an omnipotent being at one time either that he has always existed, nor perhaps (but see the discussion earlier in this chapter) that he will always exist in future. I shall be claiming in Chapter 12 that it is logically possible that, if he exists at any time, it is logically possible that he exists at all times. I have not yet shown that there could be an *essentially* everlasting and omnipotent person—that is, one whose essence is such that it is logically necessary that, if he exists at one time, he exists at all times; I shall discuss the issue of whether there could be such a being in Part III, as also the issue of whether and in what sense such a being could be a 'necessary being' (that is, one that could not not exist).

10

Omniscient

Traditionally, God is said to be omniscient. I ask the reader to recall that I am assuming in Chapters 7–11 that all the properties of persons that I discuss belong to a person at this or that time. So what does it mean to say of a person P that he is omniscient at a time *T*? The obvious natural account is that to say that P is omniscient at *T* iff he knows at *T* all true propositions.

A Coherent Account of Omniscience

Is it logically possible that there be a person omniscient in this sense? Superficially, yes. Persons obviously can know much. Why cannot a person know all? That a person knew everything would be shown by his ability to answer any question correctly. Against this, however, comes a substantial objection that I develop from arguments of Prior[1] and Kretzmann.[2] The objection claims that a person could be omniscient at a time in this sense only if he was the only person and that was the only moment (that is, period or instant) of time; and so that cannot be a correct understanding of God's omniscience—for that is supposed to include knowledge of the actions of many persons other than God at many moments of time. Kretzmann argued that there are some propositions (he calls them 'statements', but they are propositions in my sense) that can be known only at certain times or by certain persons. The proposition that 'it is now T_1' (for example, 2 October) can be known by any person only at T_1 (namely, on 2 October). (I shall understand such dates as '2 October' mentioned in this section as all dates of a

[1] A. N. Prior, 'The Formalities of Omniscience', *Philosophy*, 37 (1962), 114–29.

[2] Norman Kretzmann, 'Omniscience and Immutability', *Journal of Philosophy*, 63 (1966), 63, 409–21.

particular year—for example, 2015.) This proposition, Kretzmann claimed, is not the same proposition as the proposition that at T_1 it is T_1 (for example, that on 2 October it is 2 October), which can, of course, be known at any time. He went on to claim that 'every person knows certain propositions that no other person can know'. Suppose that Jones is in hospital, suffering from amnesia. He may know that he is in hospital, and can express this item of knowledge by 'I am in hospital'; but he may not know that Jones is in hospital, because, suffering from amnesia, he may not know who he is. Other people may know that Jones is in hospital, but what no one else can know is what Jones knows which he expresses by 'I am in hospital'. Hence, he concludes, God cannot be omniscient now in the sense of knowing (on any other day) what I or he knew on 2 October, that it was then 2 October, or what Jones knows when he knows that he is in hospital. So only if there exists only one person for only one moment could there be an omniscient person (in the sense defined).

On my account (see Chapter 2), a proposition is the proposition it is in virtue of the meaning of the type sentence that expresses it, and of the truth conditions—that is, which event would make it true—of the token sentence that expresses it. By the 'meaning' of a declarative type sentence, I mean what someone would know in knowing the criteria that determine the truth conditions of a sentence of that type. One may know what those criteria are without knowing what those truth conditions are. On this account (as on the account of the identity of 'statements' that Kretzmann implicitly assumes), two token sentences express the same proposition iff they mean the same (the type sentences that express them are synonymous) and have the same truth conditions (would be true in virtue of the same event—for example, the same substance(s) having the same properties at the same time). On this account of what it is for two propositions to be the same, Kretzmann's conclusion undoubtedly follows. For the type sentence 'I am in hospital' does not mean the same as the type sentence 'Jones is in hospital', and 'it is now 2 October' does not mean the same as 'on 2 October it is 2 October'. The criteria for the truth of one member of each of these pairs are different from the criteria for the truth of the other member. These problems for the natural account of omniscience arise with propositions expressed by sentences using 'indexicals' (see Chapter 2). Indexicals are words such as 'I', 'you', 'now', 'yesterday', 'tomorrow', 'here', '5 miles to the east of here', which pick out places, times, people, and so on by their spatial or temporal relations

to the speaker. 'Now' is the period contemporaneous with the speaker's utterance, 'you' is the person to whom the speaker is speaking, and so on. When I say 'you are ill', I am predicating the property of being ill of a person picked out as the person to whom I am talking. When I say 'it is Tuesday today', I am predicating the property of being Tuesday of the day picked out as the day on which I am talking. So necessarily no one except a certain speaker, or any speaker at a certain time or place, can use some particular indexical to refer to the same thing and so to express the same proposition.

But it does not follow from the fact that no one else can know the same proposition as some speaker asserts by a sentence that includes 'I' that no one else can know what the speaker asserts; it follows only that no one else can use that sentence (or some sentence synonymous with it) to say what the speaker asserts. For example, clearly someone else standing next to me can make the same claim about the world as I do when I say to Jones to whom I am talking 'you are ill', although he might need to make it (if, for example, he is talking to me) by means of a sentence such as 'he is ill'; and so, if we both know the propositions that we assert to be true, there is clearly a sense in which we both know the same thing. What this example suggests is that it is a mistake to define 'omniscience' in terms of knowing propositions; it cannot be the mere inability to use the same (or synonymous) words as some human speaker to express his knowledge that would make some other person not omniscient.

So I suggest that we say that the natural account of omniscience is that a person is omniscient at a time *T* iff at *T* he knows *of* any proposition that is true, that it is true. I shall understand by 'S knows of *p*, that it is true' that S knows what *p* is—that is, S knows what the sentence that expresses *p* means, and what are the objects (substances, properties, or times, and so the event) to which the referring terms of the proposition refer, and S knows that the proposition expressed by that sentence is true. But, in order to know *p*, S must also think of those objects in the way that an utterer of a sentence expressing *p* thinks of them. For example, if S knows of the proposition 'Jones is in hospital' that it is true, S knows what it is for someone to be in hospital, and knows who Jones is, and knows that the person referred to, Jones, is in hospital. But, when Jones says 'I am in hospital', S might know what the proposition expressed means, and know to whom 'I' refers—that is, Jones—and know that the proposition expressed is true, but, unless S is Jones, he could not himself

know that proposition. Knowing a proposition *p* entails knowing of *p* that it is true, but knowing of *p* that it is true, does not entail knowing *p*. So the issue is whether it is logically possible for there to be a person who knows of all true propositions that they are true. I shall now suggest that the fact that a proposition is one of the two kinds of propositions considered by Kretzmann, those that use indexicals referring to persons or times, does not as such make it impossible for anyone other than the speaker or anyone speaking at any other time to know of that proposition that it is true.

Nevertheless, when I say 'I am in hospital', I know to whom I am referring better than any human other than myself can know. For every other human picks me out by my body (constituted by physical objects having physical properties—that is, publicly observable properties), whereas 'I' pick out myself as the subject of the pure mental events that I am having—I am the subject of the aches and pains, the beliefs about my condition, and the desires to get well that are mine when I am ill. In the terminology introduced in Chapter 3, I refer to myself by an informative designator—such as 'I' or 'Richard Swinburne' as used by me. If I know how to use these words, then—when favourably positioned, with faculties in working order, and not subject to illusion—I cannot be mistaken about when to apply them; and, when I am considering applying these words to a person in virtue of his being the subject of a present experience, no mistake at all is possible. I am, in Shoemaker's phrase, 'immune to error though misidentification'.[3] I cannot know how to use the word 'I', recognize that someone is having some conscious event (for example, some pain), and still wonder whether it is I or someone else who is having that event, in the way that an early explorer could know how to use the word 'Everest', and yet wonder whether the mountain at which he is looking is Everest. By contrast, other humans would not know the difference between me and some other human who lived instead of me, but who looked the same as me and whose body had all the same history through time and so made all the same movements and uttered the same sentences as I did. In that situation I would not exist, but other humans would not know the difference between me existing and this qualitatively similar person existing, and so know

[3] Sydney Shoemaker, 'Introspection and the Self', in Q. Cassam (ed.), *Self-Knowledge* (Oxford University Press, 1994), 82.

what I know now. Other humans are not 'immune to error' in respect of whether they are looking at me, whereas I am 'immune to error' about whether it is I who am now having some experience.[4] So other humans cannot know what Jones knows when he knows of the proposition expressed by his sentence 'I am in hospital'—that it is true.

But, although other humans can have knowledge of me only via my body through which I manifest my mental life, I cannot see any logical impossibility in the suggestion that there could be a person of a different kind from humans who could know the difference between me existing and this qualitatively similar person existing, and so know me as well as I know myself (but not in the way I know myself, by experiencing my experiences). I have already sought to describe logically possible circumstances under which it would be true that there is a creator of the universe who determines what causes what; he determines which thoughts and feelings someone has if we interfere with their body or brain in certain ways—that they get a pain if we stick pins into them, and so on. And so he determines that, at a certain stage of embryo development, there is a person who has thoughts and feelings. And—if he can determine that—it seems natural to suppose that he can determine who that person is; that is not a matter of chance, but something under his control that it is I rather than someone else who has the mental life associated with the body that is contingently mine. And, if that is logically possible, then the creator can know of that proposition expressed by Jones, 'I am ill', that it is true, since he can know what any sentence that expresses it means, and know to what Jones is referring by 'I' and so know that the proposition that Jones is expressing is true, although, of course, he would not know that proposition. It is not the fact that other humans cannot refer to me as 'I', but the fact that other humans do not have the privileged access to myself that I have, which means that they cannot know fully to whom I am referring when I make a claim about myself. But I suggest that we can tell an intelligible story (that is, utter logically possible sentences) that entail that there is a person who can know fully to whom I am referring; and so can know

[4] For fuller argument to show that 'I' is an informative designator, and that the subject of mental events has a privileged access by experience to who he is and to what his mental events are, not available to other humans, see my *Mind, Brain, and Free Will* (Oxford University Press, 2013), ch. 6.

(as well as Jones can) of the proposition expressed by the sentence uttered by Jones 'I am in hospital' that it is true.

I now turn to propositions expressed by sentences using temporal indexicals. The first issue with respect to 'it is now 2 October' uttered on 2 October is whether the proposition expressed by this token sentence is true at any other time than the time at which it is uttered. The type sentence 'it is now 2 October' uttered at any other time does, of course, express a false proposition, but that is because, 'now' being the kind of indexical it is, that type sentence does not express the same proposition as it does when uttered on 2 October. But the token sentence, if uttered on 2 October, surely did express a true proposition when uttered then, and one that expresses a proposition that is true at all times. So what makes that proposition true at other times? In referring to a period as 'now' we are referring to a period by a contingent property of it, possessed by it only at a certain time, but we are saying something about that period that has a different essence from occurring 'now'. We are saying that the actual period of time that has the contingent property of occurring now also has the property of being 2 October; that, if true, would remain true, even if we could no longer express it by the same sentence.

So what is it for a period of time to be the period it is? What is the essence of a particular period that makes it different from other periods? On one account, most periods of time are the period they are in virtue of their temporal relations to other periods (for example, being 2 October is just being the day after 1 October), and most of those other periods are what they are in virtue of their relations to other periods, until we reach some period or periods that are what they are in virtue of what happened or is believed to have happened at them—for example, that '2015' is 2015 in virtue of its being 2015 years later than the year in which it was believed that Jesus Christ was born. In that case, by 'it is now 2 October' we are picking out a particular period whose essence is ultimately a matter of the temporal relations that events happening then have to other events. But that seems implausible, because the period to which we are referring by 'now' would still be the period it is, even if there were quite different events happening now and quite different events had happened earlier in the world's history.

The alternative account of the essence of a period of time is that it is what it is in virtue of something intrinsic to it other than the events that

are happening at it (as on the analogy of time as a river observed from the river bank, each segment of which is what it is in virtue of the particular molecules of water that it contains). In that case, both 'now' and '2 October' are ways of picking out that essence by contingent properties of it. And, although we cannot describe that essence, we do have a clear idea of what we are talking about when we talk about a particular time picked out by the contingent property of occurring 'now'.

When we see some event occurring now, we distinguish between the event and the period of time at which it is occurring, and we can readily make sense of the idea that we might not have existed now and that totally different events from those that are occurring now might be occurring now. Yet we can make this distinction only if we have a clear conception of what it is to be that period, a clear conception of the essence of what is the period referred to by 'now' and how it differs from other periods. And, if that is right, we could not suddenly on 3 October totally lose our understanding of what we were referring to on 2 October by 'now'. Further, we can remember or learn about events that happened at various past periods, and predict or imagine events happening at various future periods, all picked out by their temporal distance from the present, and again we can distinguish between the period and the events and suppose that quite different events happen at those periods. And yet it is not essential to any such period that it is past or future, since we can make sense of a situation—that is, describe a logically possible scenario, in which we are now present at that past or future time. We could do that only if we can grasp to some extent what is the essence of that past or future time. At any rate, it should be clear that periods of time are what they are, not in virtue of whether they are occurring now or of which events are occurring at them or at other temporally related times. So, even if our grasp of what that essence is is very weak for periods other than the one that we are currently experiencing, it should be logically possible that some being of superior powers should be able to grasp that far better, and so know of the proposition expressed on 2 October by the sentence 'it is now 2 October' that it is true, not merely on 2 October but on any other day. That sentence is claiming of the period picked out by 'now' on 2 October when it has the property of occurring, that it has the property of being 2 October always.

All indexicals can be analysed in terms of the two fundamental indexicals, 'I' and 'now'. For example, 'yesterday' is 'the day before the

day that I am experiencing now', and 'here' is 'where I am now'. Hence the same pattern of argument can show that, even when it is not logically possible that some proposition could be known by more than one person or at more than one time, it is logically possible that there be a person who could know *of* every true proposition that it is true. So I suggest that the following definition of omniscience captures what those who claimed that God knows all truths were really getting at:

> S is omniscient at a time *T* iff S knows at *T* of all true propositions that they are true.

I will call the sense of 'omniscient' captured by this definition the 'strong' sense of 'omniscient'. The existence of propositions expressed by sentences containing indexicals does not seem to constitute a cogent objection to the logical possibility of there being a person omniscient in this sense.[5] It is for the reasons that I have been discussing in this section that I expressed the knowledge requirement contained in definition [ϵ] of omnipotence, not as the requirement that to be omnipotent a person has to know all true propositions of a certain kind, but as the requirement that he has to know *of* all true propositions of a certain kind that they are true.

The Incompatibility of Omniscience and Free Will

But, even given that there is no incoherence in supposing there to be an omniscient person, our concern is whether there can be an omnipotent person who is also omniscient in the strong sense analysed in the previous section. I argued in the previous chapter that an omnipotent person (as defined by definition[ϵ]) could not know his own future free choices—and, unless he had promised exactly what he would do

[5] The view expressed in this section is similar to that of Edward Wierenga. In *The Nature of God* (Cornell University Press, 1989), 48–53, Wierenga expounds the view that humans have essences not knowable by other humans but that they are such that there is no reason why God should not know them. On times, he claims (p. 182) that we can all know the essence of the time picked out by 'now' when it is that time, but we cannot know that essence at other times, although 'this limitation on our ability is not essential to the account'; and so the essence is such that there is no reason why God should not know it at any time.

for all future time, he would have plenty of free choices to make. For this reason we need to understand God being 'omniscient' in a weaker sense that as 'knowing of all true propositions that they are true'. (I continue to assume, until we reach Chapter 12, that the divine person whose nature we are seeking to analyse is a temporal being, one who exists at some or all periods of time.) Because this phrase 'knowing of a proposition, that it is true' is very cumbersome, I shall often summarize it in future (since we will not be discussing the particular issue of the previous section) by the inaccurate 'knowing a proposition'. I ask the reader to assume that it is always to be read in the more careful way.

A further reason (and the one usually adduced) for holding that we (or at any rate most Christians and Jews and many Muslims) must understand God being 'omniscient' in a weaker sense than as 'knowing of all true propositions that they are true' is provided by the doctrine that God has given to humans free will (of a limited kind), to choose between good and evil and (as I read most expositions in the Christian tradition of what that 'free will' amounts to[6]) a libertarian free will—that is, free will to choose this rather than that, independently of all the causes acting upon them and influencing them. There remains, however, in the Christian tradition the difference between God's free will and human free will—that, while humans are clearly subject to non-rational influences that 'push them' towards making some choices rather than others, God is subject to no such non-rational influences. Human free will is limited free will in this respect—that it is a lot easier for us to make some choices than others, and also because, in virtue of the narrowness of the influences to which each of us is subject, only some choices and some of the reasons for making them occur to us, and also, of course, because our powers are limited to what we can do with and through our bodies. But the supposition that humans have even limited libertarian free will seems to conflict with the supposition that God is omniscient in the strong sense, for the same reason as, God's free will rules out God's omniscience in the strong sense. Augustine discusses this objection which I express in my own terminology: 'If God is omniscient at some time *T*, then at *T* he foreknows all future human actions. If God foreknows anything, then it will necessarily come to pass. But if a human action will necessarily come

[6] For a brief summary of the history of Christian thinking on the extent of human free will, see my *Responsibility and Atonement* (Oxford University Press, 1989), 138–9.

to pass, then it cannot be free.' Augustine's solution was to reject the libertarian account of human free will, and affirm that the human actions may be free, even if they come to pass by necessity.[7] Aquinas put forward a different solution to this objection by making an important distinction between 'necessarily, if God foreknows anything, it will come to pass' and 'if God foreknows anything, it will necessarily come to pass'; and argued that, while the former is true, that does not entail that humans do not have free will. Only the latter would entail that, and the latter—he claimed—is false.[8]

However, things are by no means so simple. Not merely of God is it true that necessarily, if he foreknows anything, that thing will come to pass. It is true of anyone at all—you can only foreknow something if it is true that it is going to happen. 'Necessarily, if God foreknows anything, it will come to pass' is hardly an interesting theological truth. It is, in fact, from neither of the propositions considered by Aquinas that the difficulty arises for those who affirm both divine omniscience and human freedom. The difficulty arises not from the true proposition that necessarily whatever God knows will be, but from the proposition that, whatever will be, necessarily God knows it. 'Whatever will be, necessarily S knows it' is true of S only if S is a person omniscient in the strong sense that I have been assuming so far, as God is usually supposed to be. The problem for human libertarian free will with the claim that, whatever will be, necessarily God knows it, is shown by the following argument.[9]

Knowledge entails belief. If God knows in 1974 of all true propositions that they are true, then in 1974 he believes of all true propositions that they are true. And it seems evident that someone's having a certain belief at some time is a hard event at that time;[10] it seems evident that someone's belief in 1974 about what will happen in 1976 is a hard event in 1974. A hard event at a time, as defined in Chapter 9, is an event whose truth conditions are to be found solely at that time, which I analysed as

[7] For exposition and commentary, see William L. Rowe, 'Augustine on Foreknowledge and Freewill', *Review of Metaphysics*, 18 (1964), 356–63; republished in Baruch A. Brody (ed.), *Readings in the Philosophy of Religion* (Prentice-Hall, 1974).

[8] *Summa Theologiae*, Ia.14.13.ad.3.

[9] This argument is developed from the argument put forward by Nelson Pike, 'Divine Omniscience and Human Freedom', *Philosophical Review*, 74 (1965), 27–46.

[10] See Additional Note B.

(roughly) an event that could occur at that time whether there were any times before or after that time. It looks as if it is what happens in 1974, whether or not there are times before or after 1974, that makes it the case that God has the beliefs he has in 1974. I argued in Chapter 9 that it is not logically possible that a cause can cause an earlier (hard) event. What happened in 1974 is already fixed and so unalterable by anything that happens in 1976. So Jones's action in 1976 could not cause God's belief in 1974 that the proposition that Jones would do that action in 1976 is true. It follows that, if Jones has libertarian free will in 1976 whether or not to mow the lawn, then by mowing or not mowing the lawn in 1976 Jones could bring it about that whatever God believed that Jones would do in 1976 was false, and so did not constitute knowledge. If Jones has libertarian free will, there could be no guarantee that God's belief about what Jones will do is true.

It is true that 'God knows in 1974 that Jones will mow the lawn in 1976' is not a hard event in 1974, for whether God's belief in 1974 constitutes knowledge depends in part on whether that belief is true, and that depends on whether Jones does mow the lawn. But that does not alter the fact that, because knowledge entails belief and belief at a time is a hard event at that time, if humans have free will in the libertarian sense, it cannot be true that, 'whatever will be, necessarily God knows it'. So—to generalize—if many humans have even limited libertarian free will, it could only be an enormously fortunate coincidence if all God's beliefs about the future were true, and God could not be essentially omniscient.

The reason why (in my view) the Judaeo-Christian tradition has on the whole claimed that human free will is libertarian free will is that it holds that humans are morally responsible for their actions, culpable, and so deserving punishment for their wrong actions, and perhaps also praiseworthy for their good actions. It has assumed that humans could be morally responsible only if they have moral beliefs and libertarian free will and so are the ultimate source of whether they choose to do what they believe right or what they believe wrong. The apparent incompatibility between divine omniscience (in the strong sense) and human free will would, of course, disappear if we suppose that moral responsibility does not require libertarian free will, but merely some kind of 'compatibilist' free will. For a compatibilist, what makes us morally responsible is not our intentions not being fully caused, but which intentions we have

and the way in which we form them. According to Hobbes[11] and Hume,[12] a person acts freely iff he does what he chooses to do, even if what he chooses is predetermined by his brain state or upbringing. It would seem to follow that the only factor that would make someone not responsible for the intentional actions that they do (or fail to do) is physical inability to do or not do it. Someone is not responsible for not doing some action only if he is prevented from doing it by physical inability. And only if physical forces literally force a person to do something (for example, someone else forces the person's finger against a trigger so that it makes the gun fire), and so the action is no longer an intentional action, is that person not morally responsible for the action. Hume wrote that, when applied to voluntary actions, 'by liberty . . . we can only mean a power of acting or not acting according to the determinations of the will; that is, if we choose to remain at rest, we may; if we choose to move, we also may'.

Modern compatibilists have added to this simple form of compatibilism the requirement that to be morally responsible someone must not be influenced solely by some irrational desire, but must exhibit some kind of rationality in the formation of their intentions. A psychopath or someone acting solely under the influence of an overwhelming craving for heroin or an agoraphobia without having any moral beliefs about the matter is not, they allow, morally responsible. Harry Frankfurt distinguished first-order desires (to eat, drink, smoke, and so on) from second-order desires, which are desires to have or to act on some first-order desire rather than another.[13] Thus I might have a second-order desire that I do not act on my first-order desire to smoke or to inject heroin. We have, in Frankfurt's view, 'free will' to the extent to which we exercise the capacity to conform out 'volitions' (that is, intentions) to our second-order desires (or higher-order desires if we have them). Without second-order desires, we are mere 'wantons'; and if we have second-order desires but they do not influence us, we are in the same situation as wantons, since we are subject to addictions and phobias that make us not morally

[11] See Thomas Hobbes, *Leviathan*, 2.21.

[12] David Hume, *An Enquiry Concerning Human Understanding*, sect. 8, pt I.

[13] Harry G. Frankfurt, 'Freedom of the Will and the Concept of a Person', *Journal of Philosophy*, 68 (1971), 5–20; repr. in G. Watson (ed.), *Free Will* (2nd edn, Oxford University Press, 2003).

responsible for our actions. Gary Watson suggested that the second-order desires that matter are those that reflect the agent's conception of what she has reason to do or be—that is, her moral beliefs.[14] So, Watson suggests, having 'freedom of will' consists in conforming one's will to one's moral beliefs. The problem with that suggestion, as with many similar ones that equate free will with rationality, is that it seems to make us free if we overcome temptation but not free if we do not. So how can anyone be culpable for yielding to temptation and exhibiting 'weakness of will', as we normally suppose that sometimes he can be?

Over many years J. M. Fischer (sometimes in collaboration with Mark Ravizza) has developed more sophisticated compatibilist accounts of the rationality requirement for 'moral responsibility' for actions, which does not have this problem.[15] His final account is what he calls 'moderate reasons–responsiveness'. He does not call it an account of 'free will', but it is an account of the kind of agency for which one can be held morally responsible. To be morally responsible for doing action *A*, an agent must exhibit an 'understandable pattern of reasons—recognition'; he must be able to recognize some reasons for not doing *A* of a kind that connect with each other in ways that we can understand, and it must be possible that in some circumstances such reasons would lead him not to do *A*. If there is some reason that the drug addict will recognize as a reason for not taking drugs (for example, that he would need to kill someone in order to get the drugs), and in some circumstances would act upon the reason (for example, he would not kill several women in order to get drugs), then, according to Fischer, he satisfies the reasons–responsiveness necessary condition of moral responsibility. Fischer also proposes a further necessary condition of moral responsibility for an action: that the agent recognizes the action as his own, and does not think of it merely as series of movements produced by some other being.

All these different versions of compatibilism agree that physical inability to do some action or physical force making one do the action has the consequence that the agent is not morally responsible for doing

[14] Gary Watson, 'Free Agency', *Journal of Philosophy*, 2 (1975), 205–20; repr. in Watson (ed.), *Free Will*.

[15] See in particular J. M. Fischer and M. Ravizza, *Responsibility and Control* (Cambridge University Press, 1998).

it or not doing it. The rival theory of moral responsibility, incompatibilism, holds that being fully caused to do or not do some action by any cause whatsoever makes one no longer morally responsible for doing or not doing the action. But it claims that the reason why physical inability deprives an agent of moral responsibility for not doing some action is that it is not then causally possible for him to do the action. So surely, the incompatibilist argues, if any other cause makes an agent unable to do the action, he should also be deemed not morally responsible for not doing it. And, if that applies to omissions to act, there seems to be no reason why it should not apply to actions as well. If someone is predetermined to steal, it is not causally possible for him not to steal and so surely he is not morally responsible for stealing. Hence, whether it is an irresistible desire or a moral belief caused by a brain event that fully causes an agent to do some action (that is, is a sufficient cause of this), then surely he is not morally responsible for doing it. The compatibilist, however, claims that there is the crucial difference between the case where an agent is prevented by physical inability from doing an action and the case where he is fully caused not to do it by some desire or brain state, that in the latter case he intends not to do the action whereas in the former case he intends to do the action. But, replies the incompatibilist, if he cannot help his intentions, why should that difference matter?

It would, however, be generally recognized that the degree to which someone is culpable or praiseworthy for doing some action is crucially affected by how easy or difficult it was for her psychologically—that is, given her desires arising from nature or nurture—to do it. If a bank employee is threatened with a gun or subjected to torture, we do not judge her greatly culpable for giving a robber the key to the bank's safe, even if she thought that it would be wrong to do so—given her very strong desire to go on living or to cease to be tortured. Or, if a young man steals when all his peers are stealing and would insult and despise him if he did not steal, we judge him less culpable than he would be otherwise—given his strong desire to be liked by his peers. It is a simple extrapolation from the fact that, the stronger a person's contrary desires, the less he deserves blame for doing what he believes wrong, that, if those desires are totally irresistible, that person does not deserve any blame at all. Hence persons are morally responsible iff they have free will (in the libertarian sense) and moral beliefs. The latter clause is needed, because

one can be morally responsible for choosing wrong rather than right only if one can detect some difference between them.[16]

There has been very considerable discussion in recent philosophical articles and books of the rival compatibilist and incompatibilist views of moral responsibility, but, for the reasons given above, I support the incompatibilist view. So the assumption that humans do have libertarian free will would seem to provide an additional reason (in addition to the reason that God himself has libertarian free will) why we need to understand God's omniscience in a sense weaker than the strong sense of knowing of all true propositions that they are true. However, in view of the strong Christian tradition that God is omniscient in the strong sense, philosophers have put forward various theories that would have the consequence that there is no incompatibility between divine omniscience in the strong sense and human free will.

Alvin Plantinga attempts to avoid the apparent incompatibility between God's omniscience (in the strong sense) and human free will by postulating that God's beliefs at a time *T* about future human actions are soft events at time *T*.[17] So, he claims, the event of God having in 1974 a certain belief about 1976 is a soft fact about 1974, the truth value of which depends in part on what happens in 1976; by mowing the lawn in 1976, Jones would bring it about that God believed in 1974 that Jones would mow the lawn in 1976 (and also at the same time bring it about that that belief was true). In medieval terminology propositions stating hard facts about a time that is already past are 'accidentally necessary'—'necessary' because they are unalterable, but only so 'accidentally' because they become hard facts only when the time of the event that makes them true is past. Ockham argued that, while many propositions about the past are accidentally necessary, not all are;[18] Plantinga claimed that propositions about God's beliefs about the future are not in that sense necessary until the future time arrives.

[16] For argument that praise and blame should be attributed to an agent in virtue of whether he does what he believes to be good or wrong, not in virtue of whether he does what is in fact good or wrong, and a more precise explication of that claim, see my *Mind, Brain, and Free Will*, 210–14.

[17] Alvin Plantinga, 'On Ockham's Way Out', *Faith and Philosophy*, 3 (1986), 235–69.

[18] See William Ockham, *Predestination, God's Foreknowledge, and Future Contingents*, trans. M. M. Adams and N. Kretzmann (Appleton-Century-Crofts, 1969), 46–7.

However, it seems to me obvious that, in the sense of 'belief' with which we are concerned (see Additional Note B), someone's having a belief at a time *T* is a hard event at that time. Given that to know some proposition entails to believe that proposition, Plantinga's account entails that the proposition that God knows all true propositions would mean something very different from what it is normally supposed to mean. Plantinga is arguing that human free will is compatible with God's 'omniscience' by redefining 'omniscience', so that the apparent incompatibility disappears. But then the claim that 'God is omniscient' would not mean anything like what it normally means; for, abandoning the rule that 'S believes that *p*' (where a 'belief' is a narrow-content belief—see Additional Note B) entails that no event at a later time can make any difference to the truth value of the proposition expressed by that sentence, involves understanding 'knows' and 'believes' in highly analogical senses, so that it is far from clear what the words mean. So we cannot regard this suggestion as proving that the propositions normally expressed by 'God knows all true propositions' and 'humans have libertarian free will' are compatible.

A similar but somewhat more appealing solution to the apparent incompatibiliy is to claim that propositions about the future actions of agents are neither true nor false until the agents do or do not do the actions. For, in that case, in order to be omniscient at some time a person could know all propositions true at that time without knowing those propositions. A person is omniscient in 1974 if he knows all propositions that are true in 1974. All propositions that correctly report what happened in earlier years—for example, that I moved house in 1972 or that my grandfather died in 1963—were true in 1974, and in 1974 an omniscient being must know them. But, if you maintain that propositions that correctly predict what will happen in later years (or at least propositions that correctly report the future actions of free agents) are not true or false until that which they predict does or does not occur, then you allow that a being may be omniscient without knowing them. A justification for saying this might be that only after the time at which an event happens that makes some proposition true or false is its occurrence fixed (in the sense delineated in Chapter 9). A number of philosophers from Greek times onwards have maintained that many propositions about the future are neither true nor false until the time to which they refer. Aristotle seems to have claimed that 'either there will be or there will not be a sea-battle

tomorrow' may be true now without either 'there will be a sea-battle tomorrow' or 'there will not be a sea-battle tomorrow' being true now.[19]

This attempt to avoid the incompatibility seems to me to depend on using 'true' in a way different from the way in which it is ordinarily used. Ordinarily we speak of claims about the future (including claims about any future free actions) being true or false. I may say on Tuesday 'Jones will go to London tomorrow', and you may comment 'What you say is true'. Suppose Jones does go to London on Wednesday. Then, on Thursday, looking back, someone may say to me 'What you said on Tuesday was true'. In normal use, propositions about a named future time (including propositions about any future free actions) are true or false—timelessly, even though that which makes them true or false lies in the future. What I claim may be true, even if I do not know it to be true, and even if what I claim has yet to occur. However, we could easily decide to use 'true' and 'false' in a way different from the normal way but in a way that is not totally idiosyncratic, and call a proposition 'true' or 'false' only after its truth value has been 'fixed' by the actual occurrence of the event predicted (or perhaps after other events have occurred that made it causally necessary that it would occur). It does not sound too unnatural to say 'it's not yet true that he's married, but it soon will be'. So, unlike in the case of 'believe', there is a not too unnatural use of ordinary language in which 'true' can be given a sense in which 'God knows all true propositions' is compatible with 'humans have free will'.

However, it seems evident to me that those who claimed that God is omniscient in the strong sense meant that claim to entail that God knows everything that is going to happen; and so, if we adopt the unusual use of 'true' and 'false' just described, we could easily express this claim in a different way by saying, not that God knows all propositions that are true now, but that God knows all propositions that ever will be true. And without doubt a large majority of Christian theologians over many centuries have held that God knows what we will do freely in the future. A papal 'bull' (that is, an official—though not purportedly infallible—proclamation) of Pope Sixtus IV in 1474 condemning certain teachings of one Petrus de Rivo condemned the doctrine that a proposition asserting that some future event will occur only becomes true when

[19] Aristotle, *De Interpretatione* 9.

that event is unpreventable,[20] and thereby condemned the way of avoiding the apparent incompatibility between God's omniscience and human free will just described. So, because we cannot avoid the basic claim that God being omniscient in the strong sense entails that God knows everything that is going to happen by changing the use of 'true', I shall in future continue to use 'true' and 'false' in the normal way.

The way most frequently discussed today for avoiding the apparent incompatibility is 'Molinism', the theory due to Luis de Molina, a sixteenth-century Spanish Jesuit.[21] Molina held that there were stages in God's knowledge prior to creation, which he regarded as distinguishable stages (although occurring simultaneously). First there is the stage at which God knows all (to use my terminology) metaphysical possibilities, and so all the possible natures and so possible causal powers that substances could have, and so for each of the circumstances in which God could put substances, what they would do in so far as that was causally necessitated by their natures. That stage is the stage of God's 'natural knowledge'. Among the creatures God could create are innumerable creatures with free will (in the libertarian sense—that is, ones such that there is no full cause determining how they will choose to act). Then there is the second stage at which God acquires in addition a different kind of knowledge, which Molina calls 'middle knowledge'. This is knowledge of what substances with free will would in fact choose in each of the circumstances in which, if God were to create them, they could be placed. So he knows that, if he were to create Jones and bring it about that he occupies a certain house, then he would mow the lawn in 1976. God thus knows, to use the modern expression, all true 'counterfactuals of freedom'. (A 'counterfactual' is a conditional proposition—that is, one of the form 'if *C* occurs, then *Z* occurs', in which it is implied that *C* did not or would not occur, and so is normally expressed in English as 'if *C* were to have occurred/were to occur, then *Z* would have occurred/would occur'. A 'counterfactual of freedom' is one where the consequent concerns what an agent would do freely—for example, 'if *C* were to occur, A would do *Z* freely'. The name 'counterfactual of

[20] Denzinger, *Enchiridion Symbolorum*, no. 1394.

[21] See the translation (with a very clear introduction) by A. J. Freddoso of part IV of Molina's *Concordia*, under the title *Of Divine Foreknowledge* (Cornell University Press, 1988).

freedom' is, however, somewhat of a misnomer, because 'counterfactuals of freedom' include conditionals in which the antecedent does in fact occur because God brings about *C*). Then, Molinism holds, in the light of God's knowledge of all true counterfactuals of freedom, he decides which substances to create and in which circumstances to put them. So, after executing this decision, God will have actual foreknowledge of what free creatures will freely choose.

One objection to Molinism is that true 'counterfactuals of freedom' cannot be 'barely true'; all true propositions have to be 'grounded'; there has to be some state of affairs that makes them true. 'Richard Swinburne lives in Oxford' is grounded by the actual state of affairs of Richard Swinburne living in Oxford. 'Tony Blair was Prime Minister' is grounded by the actual past state of affairs of Tony Blair being Prime Minister. Ordinary true counterfactuals that concern events, the occurrence of which is determined by laws of nature, are grounded by those actually operating laws of nature. The true statement 'if this iron were heated, it would expand' is grounded by a (low-level) law of nature that all iron expands when heated, which—given the SPL account (see Chapter 8)—is to be analysed as 'all iron has the power to expand and the liability to exercise that power when heated'. But, for a counterfactual of freedom, there is before the occurrence of the state of affairs reported by the antecedent (*C*) no actual state of affairs that grounds it (nothing that makes it the case that the counterfactual is true), and in most cases (when God does not being about *C*), there never will be.[22]

A. J. Freddoso argues that the fact there is as yet no state that grounds true propositions about the future (for example, 'it will rain tomorrow') does not mean that those propositions cannot be true; they may be 'barely true'.[23] However, we must note, if the counterfactual is true, if there is not yet such a state, there will be such a state (either constituted by the states referred to in both the antecedent and the consequent of the conditional, or by the operation of laws of nature that entail that conditional). Yet most counterfactuals of freedom, 'if S is in circumstances *C*, he will do *Z* freely', are such that (if there is a God) God will not make

[22] For a statement of this objection to Molinism, see pp. 110–11 of R. M. Adams, 'Middle Knowledge and the Problem of Evil', *American Philosophical Quarterly*, 14 (1977), 109–17.

[23] Freddoso, *Of Divine Foreknowledge*, 68–75.

S or put him in circumstances *C*; and so there neither was, is, nor will be any state of affairs that grounds the counterfactual.

There are many sophisticated modern articles and book chapters arguing for and against Molinism.[24] But I suggest that it remains open to the simple objection discussed earlier against any doctrine of divine foreknowledge.[25] If Jones freely forms his intention in 1976 to mow the lawn, he has it in his power to make false whatever belief God may have in 1974 about how he will choose. In theory Molina and his many modern followers will grant that; but they will add that Jones will not exercise that power, and God knows that he will not—before ever he created him. However, I would repeat my earlier point that—given the impossibility of backward causation—God could not know this because it depends on a free decision that Jones has not yet made. But in holding that God knows counterfactuals of freedom concerning people whom he may decide not to create, Molinism is open to the further objection that, if how he chooses is really up to Jones at a particular time, this is not something that could be known if God decides never to create Jones and so Jones never exists. I conclude that Molinism is implausible; and repeat my earlier conclusion that, if agents have free will, there can be an omniscient being (in the strong sense) only given an enormously improbable coincidence that his beliefs are true on every occasion on which he has a belief about an agent's free choice; and it is impossible that there be an essentially omniscient being.

My argument so far has assumed that God is in time; he exists and knows propositions today, he existed yesterday and knew propositions yesterday, he will exist and know propositions tomorrow. Hence the argument against the compatibility of divine omniscience (in the strong sense) and human freedom is an argument against the compatibility of divine *fore*knowledge and human freedom. God cannot know beforehand how humans will choose freely; and the same pattern of argument

[24] See the whole of Adams, 'Middle Knowledge and the Problem of Evil'; also R. M. Adams, 'Plantinga on the Problem of Evil' (pp. 230–2) and Alvin Plantinga, 'Replies' (pp. 372–9) of J. E. Tomberlin and P. van Inwagen (eds), *Alvin Plantinga* (D. Reidel, 1985); William Hasker, *God, Time, and Knowledge* (Cornell University Press, 1989), ch. 2; T. P. Flint, *Divine Providence* (Cornell University Press, 1998).

[25] Nelson Pike discusses contributions to the debate about omniscience and human freedom, including defences of Molinism, published since the publication of his original article, in 'A Latter-Day Look at the Foreknowledge Problem', *International Journal for Philosophy of Religion*, 33 (1993), 129–64.

rules out God's knowledge of his own future free actions. Most Christian philosophers since the third century have claimed that God is outside time, although some of them seem not to press that point when discussing this topic. They talk, as Molina does, of God's 'foreknowledge' and of knowing future states of affairs; and all the purported solutions to the apparent incompatibility of divine omniscience and human freedom discussed so far are phrased in terms of how God could know what is in his future.[26] However, many other philosophers have phrased their solution in terms of their belief that God is outside time. They rely ultimately on the timelessness of God, and hold that all propositions about God acting or having properties are not really about God acting or having a property at a (period or instant of) time, but are about God's actions and properties at one timeless moment, the divine present. On this view, which I shall discuss fully in Chapter 12, God is omniscient in the strong sense because all things are present to him (simultaneously, at his own divine moment) as they happen. Strictly speaking, God does not *fore*know anything. If this is what God's knowledge really amounts to, the earlier objections do not get off the ground. For there is no question of God first believing something and then, later, there occurring that which makes his belief true or false. The claim that God exists timelessly and yet is aware in his one timeless moment of events as they happen at different times on the human time scale does, however, have very considerable difficulties, and I shall be arguing in Chapter 12 that, unless words are to be understood in such stretched senses that it is almost totally unclear what the claim means, it is a logically impossible claim. For the present I continue to assume that God is a person existing in time, doing now this, now that. The arguments set out in this chapter show that it would be an enormously unlikely event that any person should have true beliefs about all future human free actions, and that it is not logically possible that there be an essentially omniscient person (in the strong sense of 'omniscient') existing in time, who foreknows human free actions, or even his own free actions.

[26] It is for this reason that Molina does not apply his solution to God's knowledge of his own actions. 'We . . . do not concede that through his natural or middle knowledge . . . God sees, before the determination of His will, which part *He Himself* is going to choose' (*Of Divine Foreknowledge*, 171).

Hence, just as it proved necessary to understand God being 'omnipotent' as being able to do only what, in a carefully defined sense, is logically possible—a point explicitly recognized by Aquinas and almost all subsequent thinkers—so we should understand God being 'omniscient' as knowing all that it is logically possible to know compatible with his omnipotence (as defined in definition [ϵ] of omnipotence). This means understanding 'omniscient' in what I shall call 'the weak sense' as:

A person S is omniscient during some period *T* iff S knows in each sub-period within *T* of all logically necessary true propositions, and of all logically contingent true propositions about every period before the beginning of that sub-period and of all the propositions that these entail, that they are true.

Omniscience in this sense is entailed by omnipotence (on my definition [ϵ]). It does not include knowledge of the future free actions, either of the omniscient person or of others. If our universe is created by God and the human beings in it have libertarian free will, then the limitation that God cannot know incorrigibly how those humans will act is a limitation that results from his own choice to create human beings with such free will. By choosing to give others free will, he limits his own knowledge of what they will do. As we have noted, human free will is free will of a fairly limited kind. And an omnipotent God can at any time take away even that limited free will from any human for any period of time.

If a theist is not satisfied with saying that (a temporal) God is omniscient in the weak sense that I have delineated, he would—in order to avoid the apparent incompatibility between divine or human freedom and divine omniscience—have to say that God is 'omniscient' in an analogical sense such that a definition of this term in ordinary words with mundane senses cannot be provided. We have seen how Plantinga's suggestion must be construed in this way: that an omniscient being is one who 'knows' everything, but that 'knows' has less strict syntactic and semantic rules for its use than the normal use has. But, as I urged in Chapter 4, although it may occasionally be necessary for a theist to plead 'analogical senses' of words, this is not something to be done unless it is really necessary; and for the reasons that I have given it does not seem to me that this is here really necessary. The attenuated sense of 'omniscient' that I have set out seems quite adequate for the theist's claim, and—I would think—less out of line with Christian tradition (see the Appendix to this chapter) than is Plantinga's suggestion. For a person is not less

worthy of worship if his knowledge is limited by what he has yet to decide, and if he freely limits it further—for as long or short a period as he chooses—in order to allow some of his creatures to determine their own future.

Appendix on God's Omniscience in the Bible and Church Tradition

There are several passages in the Bible that imply that God does not foreknow human free actions, and so that his omniscience should be understood in a weaker sense than the strong sense. Genesis 6 records that humans became very wicked in the period before the Flood, and so 'the Lord was sorry that he had made humankind on the earth' (Genesis 6:6). The natural interpretation of this passage entails that humans had behaved in a way in which God did not expect them to behave when he created them. Typically in the Hebrew Bible God has certain plans for humans and at their intercession changes them. Consider Abraham's intercession for Sodom (Genesis 18), or the intercession of Moses for the children of Israel (Exodus 32). Or God may change his plans because humans change their behaviour. The Book of Jonah tells how God told Jonah to preach to Nineveh 'Forty days more and Nineveh shall be overthrown', but Nineveh repented and so 'God changed his mind about the calamity that he had said he would bring upon them, and he did not do it' (Jonah 3:10.) Nineveh was not overthrown. But, if God changes his mind, he cannot have foreknown his own future action, and so his knowledge cannot be unlimited. Again in the Old Testament God often makes, as well as absolute promises (that he will do so-and-so), conditional promises (that he will do so-and-so if humans do such-and-such). Yet there would be no need for a conditional promise if God already knew how humans would act. Jeremiah is told by the Lord to tell the people that, *if* they continue in their evil way, then the Lord will destroy Jerusalem and the Temple; the Lord comments that 'it *may* be they will hearken and turn every man from his evil way' (Jeremiah 26:1–6; emphasis added). The natural interpretation of the passage is that the Lord does not know whether the people will continue in their evil way. By contrast, the New Testament talks a great deal of God's 'foreknowledge', but, at any rate sometimes, it does not seem to regard

this as absolute. Man can upset God's plans. God indeed has a book of life in which the names of those who will be saved are written. But the names in the book can be changed if humans behave in unexpected ways. According to the Book of Revelation, Christ—through an angel—told the church of Sardis that, if they 'repent' and 'conquer' (that is, live the Christian life), 'I will not blot your name out of the book of life' (Revelation 3:5), and the implication seems to be that if they do not repent and conquer, Christ will blot out their names.

However, the vast majority of Christian theologians, and some doctrinal definitions, have held that God is omniscient in the strong sense—because they thought that otherwise God would not be as great as they believed him to be. However, the first council recognized as 'Ecumenical' (that is, as having universal authority) by either Catholics or Orthodox to pronounce on God's omniscience was the first Vatican Council, which declared in 1870 CE that 'all things are open and laid bare to [God's] eyes, even those that will be brought about by the free activity of creatures'.[27] Nevertheless the Council authorized no anathema against those who held a rival view, which Councils normally did when they regarded some doctrine as heretical; and (as far as I can see) this view is not mentioned in the 1992 *Catechism of the Catholic Church*, which 'aims at presenting an organic synthesis of the essential fundamental elements of Christian doctrine'. It seems to me, therefore, unclear whether a doctrine of God's omniscience (in the strong sense) is an essential part of Catholic doctrine; and, of course, the first Vatican Council is not recognized as Ecumenical by the Orthodox Church or by any other Christian group.

One theologian, much revered as one of the great Fathers of the Church, who seems to have had considerable doubts about God's omniscience (in the strong sense) is Jerome, who allows that God might not fulfil his promises to humans if humans change their behaviour. In what he regarded as expounding teaching of Ezekiel (presumably Ezekiel 18:21–4) and Jeremiah, Jerome wrote:

> The Lord would not fulfil the good things which he had promised for them, if good people turn to sin; nor the bad things which he had promised for the

[27] My translation; for the Latin text see H. Denzinger, *Enchiridion Symbolorum* (32nd edn, Herder, 1963), no. 3003.

worst people, if they turn again to salvation . . . Because [God] prefers the repentance of a sinner to his death, he gladly changed his judgement because he saw [the sinner's] reformed deeds.[28]

A later influential Anglican theologian who did not understand omniscience in the strong sense was William Paley. He writes that God's omniscience would seem to involve 'a foreknowledge of the action [of created things] upon one another, and of their changes', but he then qualifies this by adding, 'at least, so far as the same result from trains of physical and necessary causes'.[29]

[28] *Commentary on Jonah* 3:10. PL25.1144.
[29] See W. Paley, *Natural Theology*, ch. 24.

11

Perfectly Good and a Source of Moral Obligation

Perfect Goodness

A theist normally holds that God is by nature morally perfectly good, and also that humans have a duty to obey the commands of God—that the commands of God create moral obligations. But what is it for an action to be morally good or bad, as opposed to being good or bad in other respects? We often contrast moral goodness with goodness of other kinds. We may allow that some action is good in some respects (for example, in respect of the pleasure that it gives to the agent), while denying that it is morally good. Or, conversely, we may hold that what some person did was in various ways not a good action—it was poorly executed, perhaps, or aesthetically unpleasing—while allowing that morally it was a good action. So what is it for some action to be morally good? When discussing the claim that God's actions are morally good, I suggest that what is usually meant by an action being 'morally good' is that overall, taking all reasons into consideration, it is better to do than not to do; the reasons for doing it override (are, as reasons, more cogent than) the reasons for not doing it. Conversely, an action being morally bad is it being one that overall is better not to do than to do, which there is overriding reason not to do.

In this sense, 'morally good' actions include obligatory actions (that is, duties); and morally bad actions include wrong actions, those that are obligatory not to do. Obligatory actions are those one owes it to someone to do, which are important to do and which an agent is at fault for not doing. Wrong actions are those that are obligatory not to do, that one owes it to someone not to do, that are important not to do, and that an agent is at fault for doing. Obvious examples of actions obligatory for humans are feeding and educating our children, caring for our parents,

keeping promises, telling the truth (possibly subject to qualifications), and expressing our gratitude to our benefactors; while obvious examples of wrong (human) actions include breaking promises, lying, murdering, maiming, raping, and so on. Morally good actions also include the best actions of all, supererogatory actions, actions 'beyond the call of duty', actions of doing more than we are obliged to do. Obvious examples of actions supererogatory for humans are caring for the parents and educating the children of others, and sacrificing one's own life in order to save the life of someone else. Morally good actions, in the sense that I have defined them, also include 'creative acts'—fulfilling some project in no way obligatory or supererogatory, which involves effort and patience; and such an action is better, the better objectively is the goal of the project. It is very good, for example, for humans to write novels, poems, and plays; play music, and paint pictures—even if solely for their own benefit. But it is in general more important to fulfil an obligation than to do a supererogatory good act, and clearly more important than to do a creative act. Morally bad actions include ones that are not wrong, and that I call 'infravetatory'. It is wrong for humans to rape or steal, yet it is bad but not wrong for them to watch pornographic films rather than read one or two great works of literature. And surely in general it is more important not to do what is wrong than not to do what is infravetatory.[1]

Some philosophers have given accounts of what 'moral' goodness and so on consist in, different from the one expounded above.[2] According to one account, for example, an action is morally good in so far as it brings about a good effect (that is, well-being, pleasure, or something of that kind) for humans (and, perhaps also, other sentient animals). Beliefs about the morality of actions are then beliefs about which actions benefit and which actions harm humans (or other sentient animals). Feeding the starving or showing friendship to the lonely would be fairly evident cases of morally good actions. But keeping promises to the dying or refraining from lying (when to lie would lead to the saving of life) would not, on this

[1] This account of the nature of moral goodness and the relative importance of obligations over supererogatory acts requires slight qualification and elaboration. For this see my *Responsibility and Atonement* (Oxford University Press, 1969), chs 1, 2.

[2] For examples of these different theories of moral goodness, see G. Wallace and A. D. M. Walker (eds), *The Definition of Morality* (Methuen, 1970); see also my discussion of these theories in *Responsibility and Atonement*, ch. 1.

account, be cases of morally good actions—unless in some complicated way human well-being resulted from them. But this definition of the moral has the odd consequence that it is not evidently self-contradictory to claim that it is sometimes overall better to do some action other than the morally best action. In the very natural sense of 'moral' in which—I suggest—God is said to do only morally good actions, nothing could be more important than morality. Henceforward, when I write about 'good', 'bad', and such like actions, this is shorthand for 'morally' (in my sense) good, bad, and so on actions.

I suggested in Chapter 9 that a person is a morally good person in so far as he always does what on the evidence available to him is a good action. If some person has false beliefs about the past, then he is no less good if he gives an honest but false answer to a question about the past. If a person gives money to some charity that on the evidence available to her uses its finances to prevent starvation in Africa, she is no less good if the charity uses all its finances to provide its own officials with a luxurious lifestyle. The goodness of any person depends on how probable (on the evidence available to her) it was that her actions would have their intended good outcomes, how good those outcomes would be, how probable it was that they would have bad outcomes, and how bad those outcomes would be. For this reason I suggest that the theist's claim that God is by nature morally perfectly good should be understood as the claim that God is so constituted that he always does what is—given his omniscience (in the weak sense)—probably the morally best action or best kind of action (when there is one), does an equal morally best or best kind of action where there is one, and does not do any action that is probably a morally bad action. If God did not always do what on his evidence is probably the best where there was a best, or ever did a bad action, he would be less than perfect.

Now a person omniscient (in the weak sense) will know not merely all necessary truths (including the necessary truths of morality—as discussed later in this chapter) but also all truths about the past. And, for all actions whose goodness depends on what has happened in the past, an omniscient person will know not merely which ones are probably good, but which ones are in fact good. But the goodness of many actions depends on their outcome, as with the example above of the charity. An omnipotent person is able to determine the outcome of all actions that depend solely on himself, and, so in so far as he is a morally good person, he

will be able to do not merely ones that are probably good, but ones that are in fact good. An omnipotent and so omniscient person is able to determine the outcome of all actions, but he may for good reason allow the outcome of some actions to depend on the free choices of other agents. If he does this, he will have limited his knowledge of the future. He may, for good reason, make those other agents responsible for yet others and a free choice of how to exercise that responsibility, when, on the evidence available to him about the extent to which the former agents will be tempted to do evil, it is probable that the overall outcome will be good (in virtue both of the goodness of their having free will, and the probability that they will use it to do much good and not very much evil). Then he would be none the less good if in fact they do much evil.

In the Appendix to Chapter 10 I cited Genesis 6, which records that humans became very wicked in the period before the Flood, and so 'the Lord was sorry that he had made humankind on the earth' (Genesis 6:6), the obvious interpretation of this passage being that God regretted that he had created humans because they had behaved in a way in which God did not expect them to behave—presumably because they misused their free will. In virtue of even his limited omniscience, God would have known how probable it was at the time of their creation that humans with limited free will would have done bad actions of various degrees of badness. Then, if the probability that they would behave as badly as they did was very low, and given that the good of humans having free will and often exercising it in doing good actions is a great good, then the fact that God's action of creating humans had this bad consequence would not have made him a less morally perfect being.

Given—as I argued in a previous chapter—that, for any possible world God creates, there is a better possible world that he could have created, God could not create the best of all possible worlds, or even what is probably the best of all possible worlds. William Rowe has argued that, in that case, since God could not do the best action available to him, there could not be a perfectly good God. Rowe appeals to a principle that he calls 'Principle B': 'If an omniscient being creates a world when there is a better [possible] world it could have created, then it is possible that there exists a being morally better than it.'[3] Hence, he claims, God cannot

[3] William L. Rowe, *Can God Be Free?* (Oxford University Press, 2004), 97.

be unsurpassably good, and so not perfectly good. However, as many philosophers have argued, no one can be held morally deficient for not doing what it is not logically possible to do; and, as noted earlier, it has been a normal Christian view that it is not a limitation on God that he cannot do the logically impossible. So I suggest that we should continue to understand being 'perfectly good' in the way described earlier. Sometimes, of course, theists have denied that God is 'morally' good or at all concerned with 'morality', but a little examination of what they are saying will, I suggest, reveal that these theists, unlike other theists, do not understand 'moral' in a way in which the 'moral' is what matters. The theologian who says 'God is above morality' means only that God is concerned with things more important than human good or harm, or with things other than those that humans think will bring them happiness. He does not mean that God does not do what is of ultimate importance. I suggest that, in the sense of 'moral' that I am using, almost all theists hold that God is morally perfectly good, and that this is a central claim of theism.

That there can be a person who is by nature morally perfectly good in our sense seems evidently a coherent claim. It seems coherent to suppose that there be a person who is so constituted that he always does what there is overriding reason to do, and always refrains from doing what there is overriding reason not to do. He always does the good because that is his nature.

Necessary Moral Truths

The discussion so far has assumed that there are some true moral propositions, of the form 'action *a* is morally bad', and 'action *b* is morally good', where '*a*' and '*b*' pick out particular actions done by particular agents at particular times, and 'actions of type *A* are always morally good' and 'actions of type *B* are always morally bad' where *A* and *B* are types of actions. I believe that almost all of us have moral beliefs in the sense that we believe propositions of this kind. Such propositions make claims about how things are; someone who believes such a proposition believes that it corresponds to how things are. Some philosophers have seemed to deny this, claiming that 'moral beliefs' are really not beliefs at all, but merely attitudes towards, in my terminology 'desires' about, the actions said to be 'believed' to be good or bad. On one such 'non-cognitivist' view, for

example, to believe that it is always morally wrong for a state to allow capital punishment (that is, allow the imposition of the death penalty for a crime) is merely to have a strong desire that capital punishment be not practised.[4] Now certainly some people may not have moral beliefs (in my sense) but merely strong desires about the occurrence of actions about which the rest of us have moral beliefs, but I suggest that almost all of us do have moral beliefs. We believe that the propositions we are said to 'believe' are true, and would be true independently of whether or not we believed them or had any desire that anyone should do anything about them.

Some philosophers claim that, even if almost all of us do have beliefs (in my sense) that some moral propositions are true, we are under an 'error' or 'illusion' in holding these beliefs, because—in their view—such propositions could not be true, and that therefore we all ought to treat our attitudes towards those propositions as simply strong desires about the actions said to be 'believed' to be good or bad. I will call those who hold that some moral propositions are true 'moral realists', in contrast to moral anti-realists, who claim that no moral beliefs are true.[5] We, moral realists, believe that certain particular actions are good and other particular actions are bad, and we believe that, if anyone disagrees with us, they are mistaken. In Chapter 2 I defended the principle of credulity, that in the absence of defeaters every basic belief is as such probably true merely because it seems true—that is, because we believe it: and it is more probably true, the more obvious it seems. I argued in Chapter 2 that the principle of credulity applies to beliefs of all kinds, not merely to our beliefs about what we are perceiving or remember, but also to our beliefs that we believe to be taken for granted in our culture (for example, that the earth is millions of years old), and to obvious truths of reason (for example, '2 + 2 = 4'). If we cannot believe these things, we cannot believe anything, for it is on the basis of such beliefs that all our other beliefs are

[4] The best-known forms of moral non-cognitivism are the 'emotivism' of C. L. Stevenson (*Ethics and Language* (Yale University Press, 1944)) and the 'prescriptivism' of R. M. Hare (*The Language of Morals* (Oxford University Press, 1952)). Emotivism holds that moral utterances are expressions of approval or disapproval of some action. Prescriptivism holds that moral utterances are action-guiding utterances, committing the speaker to follow (or not to follow) some course of action and urging others to do (or not to do) likewise. So, according to prescriptivism, 'this action is wrong' means something like 'may I and everyone else not do this action or any similar action'.

[5] The best-known defender of 'error theory' is J. L. Mackie. See his *Ethics, Inventing Right and Wrong* (Penguin, 1977).

founded. No foundations are surer than the most obvious ones, and these include some of the most obvious moral beliefs., As a result of experience and reflection, it is evident to almost all of us at the beginning of the twenty-first century that genocide is morally wrong, and so is suttee and so is slavery; and it is morally obligatory to keep our promises, at any rate when it causes us little trouble, barring quite extraordinary counter-considerations. And so on, and so on. Hence we should believe, in the absence of any good contrary reason, that the moral propositions that we find ourselves believing are probably true. And we should believe that the moral propositions that seem to us most obviously true are very probably true—in the absence of any contrary reason. So, if those of some other culture think otherwise, we should believe that they are obviously mistaken—just as obviously mistaken as are solipsists and flat-earthers. And if some philosopher's theory of meaning or knowledge has the consequence that there cannot be moral truths or that we cannot know what they are, then we must reject his theory, since it will be more obvious that genocide is wrong than that his theory is true.

Of course there are wide differences of opinion among humans about which actions are morally good, and which are morally bad; and the existence of these not easily resoluble differences is used as an argument to show that no moral propositions are true—for surely, the argument goes, if we are justified in believing that some moral propositions are true, there should be procedures of which we are aware (even if ones that we cannot currently apply because of practical difficulties) for determining which ones are true. I shall be arguing in due course that there are indeed such procedures, which I shall describe, and I shall show how they can be used to resolve moral conflicts.

But first, on the assumption that some moral propositions are true, I need to describe an important feature that they must have, one recognized by almost all moral philosophers—the supervenience of the moral on the non-moral. The moral properties (that is, moral goodness, badness, and so on) of particular actions (picked out in terms of who did them where and when) depend on the non-moral properties of those actions (that is, what the action involved, and the kind of circumstances in which it was done). For example, the moral goodness or badness of what P did to S in 1944 depends on what the action consisted in (for example, killing), and whether it was done by a soldier to an enemy in the course of a war to defend his country against aggression, or by a mobster

to a policeman in a democratic law-governed society. No action can be just morally good or bad; it is good or bad because it has certain non-moral properties—those of the kinds that I have been illustrating. And any other action that had just those non-moral properties would have the same moral properties. If a particular act is morally wrong because (and merely because) it is an act of a mobster killing a policeman in a democratic law-governed society, any other act of any other mobster killing any other policeman in a democratic law-governed society would also be wrong. The conjunction of non-moral properties that gives rise to the moral property might be a long one or a short one. To take a different example, it might be that all acts of giving money to the poor are good or it might be that all acts of giving money to the poor in such and such circumstances (the description of which is a long one) are good. But it must be that if there is a world W in which a certain action *a* having various non-moral properties was bad, there could not be instead of W another world W*, which was exactly the same as W in all non-moral respects, but in which *a* was not bad. A difference in moral properties has to arise from a difference in non-moral properties. If a certain sort of killing is not bad in one world, but bad in another world, there must be some non-moral difference between the two worlds (for example, in social organization or the prevalence of crime) that makes for the moral difference. Moral properties, to use the technical term, are supervenient on non-moral properties.

And the supervenience must be logical supervenience; that is, our concept of the moral is such that it is not conceivable that a world W in which a particular action *a* is wrong could be different in the sole respect that *a* is good. It follows that there are logically necessary truths of the form 'If an action has non-moral properties A, B, and C, it is morally good', 'If an action has non-moral properties C and D, it is morally wrong', and so on. If there are moral truths, there are metaphysically necessary moral truths—fundamental principles of morality. And, given that the non-moral properties are picked out by informative designators—as I shall assume in future—these fundamental principles will be logically necessary—that is, such that their negations are inconceivable and so entail a contradiction. It follows that in their nature they are just like the propositions expressed by such sentences as 'all squares have four sides', or 'all triangles (that is, closed rectilinear figures with three and only three internal angles) are trilaterals (that is, closed

rectilinear figures with three and only three straight sides)', or—to take an example explored more fully in Chapter 2—sentences of the form 'If S remembers having done *X*, then S has a true belief that he did *X*'. I re-emphasize that, for all I have said so far, fundamental moral principles may often be very complicated principles—for example, 'All actions of promise breaking in circumstances C, D, E, F, and G are wrong', rather than just 'All actions of promise breaking are wrong'; and their complexity is one reason why it may take considerable time and effort to show that they are logically necessary. (I shall suggest later another more important reason why this takes considerable time and effort.)

All moral truths are either logically necessary or contingent. Contingent moral truths include, as well as truths about the morality of actions done on particular occasions by particular persons (for example, that what you did yesterday was good), also many truths about types of actions done in particular kinds of circumstances and/or by particular kinds of persons (for example, that it is always obligatory for all UK inhabitants to obey UK law). Contingent moral truths are entailed jointly by some necessary moral truth (for example, that all acts of feeding the starving are good, or that it is always obligatory to obey the law of a democratic society) and some contingent non-moral truth (for example, that what you did yesterday was to feed the starving, or that UK is a democratic society). If some suggested moral principle (for example, that capital punishment is wrong) is true, but contingent (for example, on the fact that the availability of capital punishment for a crime does not deter criminals from committing crimes), then there will be a necessary moral truth that that principle holds in those contingent circumstances (for example, that capital punishment is wrong when its availability does not deter criminals from committing crimes). Any set of the most general logically necessary moral propositions stating which moral property supervenes on which non-moral properties, which entail all other such necessary propositions, constitutes a set of the true fundamental moral principles.

The moral status of all particular actions (for example, you giving money today to this beggar) and of many specific kinds of actions (for example, giving money to beggars) depends ultimately on contingent circumstances—on what are the relevant contingent non-moral truths. Even if we know the true fundamental moral principles, we may misjudge the moral status of particular actions and kinds of action, through

ignorance of these circumstances. Even if I know that it is good to give money to those who need it and will spend it wisely, in order to know whether it is good to give money to beggars, I need to know whether they need it and how they will spend it. Moral disagreement about the contingent truths of morality is sometimes easier to resolve when it does not depend on disagreement about fundamental moral principles. But if, as I have argued, fundamental moral principles are logically necessary, disagreements about them should be resoluble by the methods described in Chapter 2. However, most attempts to show the necessary truth of moral principles by the 'direct' methods described in Chapter 2 of showing the logical necessity of non-moral propositions are seldom successful, for the kinds of reason that some attempts to show the logical necessity of some non-moral propositions also fail—for example, because disputants do not agree about what mini-entails what or when some sentence is obviously logically impossible. Yet it has been recognized by many philosophers for some years that the method of 'reflective equilibrium' that I analysed in Chapter 2, and that Rawls first drew to the attention of philosophers as a method of reaching agreement about moral issues, is a method very apt for showing that it is probable that some principle is a moral principle. I now illustrate this, and show that the reason why this method works for moral principles is the same kind of reason as the reason (developed in Chapter 2) why it works to show the probable logical necessity of non-moral sentences. That makes it very plausible to suppose that the true fundamental moral principles are themselves logically necessary truths, as—I argued—follows anyway from the apparent fact that moral propositions have truth values and that moral propositions are logically supervenient on non-moral propositions.

Most children, although brought up in very different cultures, quickly acquire a concept of a kind of action that is overall better to do than other actions, one that there are overriding reasons to do; and of a kind of action that is overall better not to do than other actions, one that there are overriding reasons not to do. They acquire these concepts by acquiring syntactic and semantic rules for the application of the words expressing these concepts in the way described in Chapter 2. The syntactic rules link these concepts to each other and to 'overall' goodness, badness, and so on. Having a belief that some action is morally good entails having some motivation to do it. Some action being morally obligatory entails that one 'owes' it to someone to do it, and that failure to do it entails

being under an obligation to apologize for the failure. Morally good actions are ones for which it is appropriate for parents sometimes to praise or even reward children, and morally wrong actions are ones for which it is appropriate for parents sometimes to blame or even punish children. And so on. The semantic rules for the application of the words expressing moral concepts consist of paradigm examples of morally good, obligatory, bad, and wrong actions. Children thus acquire a concept of 'moral goodness' that they recognize (initially) as applicable to all actions of the former kind; and a concept of 'moral badness' that they recognize (initially) as applicable to all actions of the latter kind. But they do not understand these concepts of moral goodness (or whatever) as concepts of properties connected merely contingently with the concepts of the particular paradigm examples of morally good or whatever actions by which they have been introduced to the concepts. Rather, they understand the moral concepts as determinable concepts of which the determinates are the different kinds of morally good or bad actions illustrated by paradigm examples, just as 'coloured' is a determinable of which 'red', 'green', and so on are determinates. So they would regard it as inconceivable to suppose that almost all the kinds of actions to which they originally applied the concept of moral goodness (or whatever) are really not morally good (or whatever). Someone who does allow that possibility for his concept has not got the concept that most children acquire and that I am discussing. For there would then be no semantic criteria for the application to actions of 'morally good' (or whatever); the 'paradigm examples' of moral goodness would not then be paradigm examples. And some of the syntactic criteria, such as that a 'morally obligatory' action is one that is 'important' to do, and that a 'morally good' action is one sometimes appropriately 'praised', can themselves be understood only if we understand 'important' as 'morally important', 'praised' as 'recognized as morally good', and so on. These moral terms could be understood only in terms of each other, unless they are linked to paradigm examples that illustrate the kind of importance that makes an action morally good, the kind of praise that recognizes a morally virtuous action, and so on. Otherwise 'importance' could be prudential importance, 'praise' could be praise for doing what the praiser likes to see done, and so on.

Further, the concepts of moral goodness, badness, and so on that most children acquire are surely not ones that they regard as applying merely to actions of narrow kinds, similar in almost all respects to the paradigm

examples from which they originally learnt to apply them. For, at least as they get older, children are open to reflection on what they have been taught, to argument with members of other cultures, and to experiences of new situations, leading them to extend the application of these concepts. And also to retract them—for consideration of new examples may lead them to adopt wider moral principles fitting both most of their old examples and also the new ones that have the consequence that a few of the old examples of the 'morally good' are 'morally indifferent' or even 'morally bad' (and conversely).The process of refining one's understanding of the criteria for the application of some word in the light of different kinds of example is the method of reflective equilibrium. The reader will recall from Chapter 2 that this method assumes that the simplest account of the use of sentences of some type in various narrowly described sets of circumstances is the account that most probably describes how such sentences would be used under all circumstances, and so most probably describes an aspect of the meaning of those sentences that determines their logical modality. Such an account is simple in so far as it uses few predicates designating properties easily recognizable in many different kinds of paradigm example. Clearly use of reflective equilibrium makes it possible for two groups who largely agree with each other about moral matters but have a few disagreements to reach agreement about disputed matters. For they may both recognize a simple principle underlying some set of examples that both groups recognize as paradigm cases of 'morally good' actions for which praise is appropriate, which has the consequence that one kind of action that only one group recognizes as a paradigm case of a 'morally good' action is not like the others; rather, it is a kind of action to which praise is not appropriate, and so is not 'morally good'. And similarly for the other moral concepts.

Here is an example where the simplicity of a principle depends on the fewness of the predicates designating properties that it lists, as in the analysis of 'remember' in Chapter 2. Suppose that two groups have both been taught that it is wrong for a person A to kill a person B unless B is about to kill A or some member of A's group, or A is acting on behalf of a court of law that has sentenced B to death for murdering a member of A's group, or B is an enemy combatant in war with A's group. But one group, unlike the other group, may also have been taught that it is not wrong for A to kill B in a duel with B if B has insulted A or a relative of A. Then the

second group may point out to the first group that all the examples except the disputed one are examples of situations in which B has killed someone close to A or is about to do so. So the second group suggests that a simple principle underlying all the agreed examples is 'it is wrong to kill except in revenge for a killing or to prevent further killing (of a member of one's group)'. This simple principle treats life as so sacred that it must not be taken away except in compensation for life or to prevent further loss of life; and the second group suggests that the addition of 'unless A kills B in a duel if B has insulted A or a relative of A' makes the principle implausibly complicated. The consequence of this principle is that it is wrong to kill in a duel merely to defend your family's honour. The first group may then recognize this principle, and so move on from what they have been taught when young, that killing in a duel is not wrong. As with 'know' and 'remember', investigators come to see a previous paradigm example as not an example of the same concept as the other paradigm examples. And, of course, reflective equilibrium may eventually lead both groups to develop an even simpler principle, 'it is wrong to kill except to prevent further killing'.

An example of how moral views may be developed (in this example rather quickly) by a thought experiment into a moral principle that is simple in involving few predicates, applicable to all humans rather than only to tribe members, is this biblical one. The Hebrew Bible Book of Leviticus taught that there is a moral obligation 'to love your neighbour as yourself'.[6] St Luke's Gospel tells us that, when Jesus was asked by a lawyer the question 'Who is my neighbour?', he answered it by telling the parable of the Good Samaritan,[7] ending with Jesus's question to the lawyer, which of the three who had seen the half-dead man was a neighbour to him. The lawyer's answer was 'The one who showed him mercy'—that is, the Samaritan rather than the Jewish priest or Levite. The parable was designed to elicit from the lawyer the moral intuition that the conduct of the Samaritan towards a member of a different ethnic group was an example of the kind of behaviour exhibited by someone who 'loves someone as himself'; and that what was obligatory was not just to behave in this way towards someone who lived in the same village or the next village or some exact number of miles away (a complicated

[6] Leviticus 19:18. [7] Luke 10:25–37.

and thus arbitrary restriction), but to behave in this way towards any human with whom one was in contact.

Moral disagreement may turn, not on whether a suggested principle uses few predicates, but—as with 'red' and 'colorato'—on whether the predicates that it uses designate properties easily recognizable in many different kinds of paradigm examples. I take as an example of this a case where there is moral disagreement between two groups of a kind that arises because, although both groups agree that the moral goodness or badness of some action depends on certain properties that it has, and they also agree about which of these properties make for the overall goodness of the action and which make for its badness, they disagree about which kind of property outweighs the other kind. Each disputant group agrees that the considerations adduced by their opponent group have some force—that is, would, for example, show the action to be morally good overall but for the considerations that it adduces against its moral goodness. Thus a group opposing the euthanasia involved in helping a depressed person to commit suicide may argue that such an act is overall bad because of the sanctity of human life, the possibility of helping a depressed person to recover from his depression, the value of his overcoming that depression, and so on. A group advocating euthanasia may argue that helping a depressed person to commit suicide is helping him to do what he clearly and firmly wants to do and what hurts no one else in any way. Both disputant groups appeal to considerations that the other group may admit to have some weight, although each holds that the considerations that it adduces outweigh those that the other group adduces.

In this situation the group opposing euthanasia might persuade the other group that the simplest principle underlying their many shared beliefs about it being good to help the sick, the unemployed, the unlovable, and so on, is that it is always good not to 'give up' on helping people satisfy their basic *needs*. Hence they might persuade the group supporting euthanasia that this principle is probably true and so has the consequence that one should not give up on helping the depressed to satisfy their basic need for happiness, and so on helping them to recover from their depression; and so that one should not help anyone to commit suicide. Alternatively the group supporting euthanasia might persuade the group opposing it that the simplest principle underlying their many shared beliefs about it being always good to help those who want to get an education, to have children, to travel abroad, and so on is that it is

good to help people to do what they firmly *want* to do, when that hurts no one else; and so persuade them that this applies to helping people to commit suicide.

The issue may then turn on which of the predicates used to designate the properties used in the rival principles are easily recognizable. It is often very obvious what a person 'wants' (that is, desires), but the notion of what a person 'needs' may often be very unclear; the latter depends on a view about what constitutes human flourishing, about the application of which even its defenders may be unclear. This parallels the 'red' and 'colorato' cases where whether an object of a new shade is deemed red, or a red–green object is deemed to be 'colorato', will depend partly on how easy it is to recognize the respect in which the previous paradigm examples of 'red' or 'colorato' are similar to each other, which may then lead them to agree about whether a new object is also 'red' or 'colorato'. So, too, if the paradigm examples of 'wants' provide a sharp enough concept of 'wants' to make it clear that to help a depressed person to commit suicide is to help them do what they want, but the paradigm examples of 'needs' do not provide a sharp enough concept to make it clear whether to help a depressed person to commit suicide is to prevent them from satisfying their basic needs, then in that respect the applicability of this new example of the 'wants' principle will trump the applicability of the 'needs' principle.

Alternatively the issue may depend on how many are the different kinds of paradigm example that the rival principles fit.[8] If there are a vast number of different paradigm examples where, disputants admit, it is good to help people to do what they need, and relatively few paradigm examples where it is good to help people satisfy their wants that shows that the needs principle is simpler than the wants principle, and trumps it in the euthanasia case. This principle was also at work in the example of 'red'

[8] Note that it is entirely irrelevant to the role of paradigm examples in establishing logical principles, including moral principles, whether they are examples of actual actions that we deem morally good (or whatever) or examples of imaginary actions. Hence, whether a principle 'is illustrated by many different kinds of paradigm examples' is an a priori and logically necessary matter, not as in the case of a normal inductive argument in science or history, where it is an a posteriori and logically contingent matter whether a postulated explanation explains many different kinds of evidence. That is why I am calling the role of 'fitting examples' in establishing a logical principle a facet of the 'simplicity' of the principle, which is something internal to a principle, and not—as in confirming a postulated scientific law—a matter of its relation to contingent evidence.

discussed in Chapter 2, where the more and more kinds of paradigm examples of 'red' things are available to illustrate what it is for an object to be red, the more likely it is that observers will acquire a common concept of redness on the subsequent application of which all can agree. In the moral case, as in the colour case, it requires a common kind of sensitivity to paradigm examples, whether colour sensitivity or moral sensitivity, to recognize the relevant similarities, in order to reach agreement—even if in the end the agreement is that the two principles are equally simple, and so when they clash it is equally good to give priority to wants as to give priority to needs.

Clearly, just as the more two groups share common paradigm examples of 'colorato' and 'coloré', the more probable it is that use of the method of reflective equilibrium will lead to agreement on the logical truths about colour, so the more shared examples of 'moral goodness' (or whatever) two groups have, the more probable it is that use of the method of reflective equilibrium will lead to agreement on moral principles. As with the colour example, it is often in practice necessary for someone to have had personal experience of some situation in order fully to understand what is meant by someone doing some kind of action or having some kind of experience. One might need to experience acute depression oneself in order to understand that it is a necessary moral truth that it is good to cure acute depression by means of drugs (as long as they do not cause pain, delusions, or mental impairment). But again—if this is a necessary moral truth—it is an a priori one, because it is irrelevant to its status as a truth whether anyone ever does suffer from acute depression.

Notoriously, however, as I have already commented, there are great differences between cultures and even between different members of a typical twenty-first-century Western society about the moral goodness (badness, or whatever) of different actions, and so great differences in the paradigm examples by which they teach their children what moral goodness is. People disagree about the moral goodness of capital punishment, corporal punishment, abortion, strict parental discipline, marital fidelity in all circumstances, and so on. So, even if, as I have argued, groups who have fairly similar moral views can resolve their differences by reflective equilibrium, what reason do we have for supposing that groups whose views are much further apart from each other can do so? My response is (tentatively) to put forward a contingent hypothesis that most twenty-first-century groups have enough moral views in common

to make agreement between them possible—given enough time and willingness to understand each other.

Almost all groups agree that it is good (though not always obligatory) to feed and otherwise care for their own (non-disabled) children and (mentally competent) parents and also some other members of their own group who need food or care, to keep their promises (not made under duress) except when very difficult to do so, not to steal what by community agreement belongs to another member of the group, and so on. And, similarly, they agree on many examples of moral badness, obligation, and wrongness. Not merely are there some paradigm examples of moral goodness (or whatever) on which almost all agree, but—I suggest—there is a chain between any groups of persons diametrically opposed on many moral issues, of groups who agree with one extreme group on most issues, different groups who agree with the semi-extreme group on most issues, and so on until we come to the group at the other extreme. When reflective equilibrium has moved someone away from an extreme position to a slightly less extreme position, that person will regard many of the new examples of morally good and bad actions that he comes to recognize as examples of the relevant concept just as satisfactory as the ones recognized previously and so as paradigm examples of such actions. And then that person will have much more in common by way of overlapping sets of paradigm examples with some others with whom previously he had less in common, which will provide a basis for reaching agreement that did not exist previously. And so it is possible for someone to move by a rational process consisting of many such steps from one general moral outlook to a quite different one, say from a narrow tribal understanding of which actions are overall good to a far wider one—although they will continue to hold some of the views about the goodness of helping members of their own tribe, which provided their original paradigm examples of good actions. My ground for putting forward my contingent hypothesis is that over many centuries the human race has made much progress in coming to share moral views. No longer do most humans regard slavery or duelling, let alone human sacrifice or suttee, as morally permissible. And that suggests that most of us do share a common sensitivity to what paradigm examples of 'morally good' (or whatever) actions have in common, and so a common concept of morality, the logically necessary truths of which can be discovered by a priori reflection. The common sensitivity may be

thought of as a common moral sense, which is produced in very different groups by similar instruction in the overriding nature of moral goodness inculcated by processes of praise and blame, but some very different sets of paradigm examples of 'moral goodness', between which there is nevertheless some overlap.

But surely, an objector may say, there is a big difference between the way people react to attempts to get them to change their views under the pressure of arguments appealing to reflective equilibrium when the arguments concern moral principles, from the way they react when the arguments concern ordinary (that is, non-moral) conceptual truths—the difference being that many people do not change their views about moral principles readily, whereas they do change their views about ordinary conceptual matters readily. And that suggests that there must be an important difference between the logical nature of moral principles and the logical nature of conceptual truths. There is, however, a ready explanation of this difference that has nothing to do with the logical character of the propositions involved, but everything to do with the nature of humans, which makes it difficult for us to change our moral views in the light of good arguments. Our moral views are closely connected to our emotions, some of which hinder us from recognizing moral views that otherwise we would naturally adopt. The natural emotion of anger at those believed to have molested children may lead people not to recognize their right to a fair trial, and so not to adopt the principle that everyone is entitled to a fair trial. Our moral views are also closely connected with rival desires, some of which are desires to do actions that, if we accepted certain arguments, we would have to recognize as morally wrong and so would find ourselves under internal moral pressure not to do. If someone were to reach the conclusion that there is a true moral principle that everyone ought to donate much of their income above a certain amount to providing food and shelter to those in distant countries, they might have to conclude that they ought to give a lot, when they desire not to do so. So their reluctance to give away a lot of their income may cause people to refuse to acknowledge a strong argument in favour of there being such a moral principle. Humans are only partly rational creatures. The evident powerful influence of our moral beliefs on our behaviour and thinking can readily explain much moral disagreement, and so explain why some moral issues remain 'open questions' for a long time. So there is no need to attribute the 'openness'

of such questions to a difference between the logical nature of conceptual truths and moral principles.

Despite my claim that most of us share a common concept of morality, it may sometimes be the case that there are people to whom new examples are presented and apparently simpler principles of morality are suggested, who show no tendency at all (even after prolonged exposure to them) to move towards agreement with most of us. That would suggest that these people do not have the same concept of 'morality', the same understanding of what it is for an action to be 'morally' good, bad, or whatever, not merely that they do not have the same views as most of us about which actions are morally good—just as we would reach a similar conclusion about those exposed to new colours who did not recognize them as 'colorato'. The process of acquiring concepts of 'morally' good, bad, and so on would have produced in those uninfluenced in the ways illustrated by moral arguments a different concept of 'morality' from what it has produced in most of us. But, for the reasons given, I do not think that that is often the case. There are innumerable cases of people who used to disagree about 'moral' matters, yet are shown by their subsequent agreement resulting from reflective equilibrium to have had the same concept of 'morality', a concept possessed, I have suggested, by most of the human race. I have sought to show that—given moral realism and so given that there are true moral principles—the similarity of procedures by which we establish what are the true moral principles to those by which we establish what are the true non-moral logically necessary principles makes it very plausible to suppose that both kinds of principle are (in the sense defined in Chapter 2) logically necessary—a result that alone, given the supervenience of the moral on the non-moral, is needed to make moral realism plausible. If someone does not have this common concept of moral goodness (and the common concepts of moral badness, obligation, and wrongness), he will not be able to understand the previously argued claim that God is perfectly good, or the claim that I am coming to consider that God is 'a source of moral obligation'; only new life experiences, psychotherapy, drugs, or brain surgery could help him to acquire that concept. But, in the belief that relatively few people do not have the common concepts of moral goodness and such like, I continue with the assumption that I made in Chapter 9 and for which I have now argued, that there are moral truths and that they depend on logically necessary moral truths.

The Scope of God's Perfect Goodness

It follows from that assumption that any person omnipotent in sense [ϵ] will be perfectly good in the sense delineated earlier in this chapter. Such a person will know all the necessary moral principles, and all the contingent non-moral truths about the past, on which the moral status of actions depends, and be able to determine all contingent non-moral truths about the future except in so far as—because of the goodness of so doing—he allows other persons to determine these. In so far as the moral status of some possible action of his depends on non-moral truths about the future that he has allowed others to determine, he will know the probability of the different non-moral truths, and so know the probable moral status of all possible actions. Not having any non-rational desires, he will act on reason alone, and so will do what is probably the best or equal best action, or—if there is no such—what is probably an action of the best or equal best kind, or—if there are no such—what is probably a good action, and no action that is probably bad. And, on the assumption that it would be good to give to other beings only a limited free will and degree of responsibility for others, he will normally do not merely what is probably the best action (or whatever) but what is in fact the best action. Hence he will be perfectly good.

It does not, however, follow that such an omnipotent person will not do actions of a kind that, if done by humans, would be bad, and conversely. For, whether it is good (bad, obligatory, wrong, or whatever) for some person to do an action of some kind frequently depends on the status of that person. Parents have an obligation to educate their own children; they do not have an obligation to educate the children of foreigners living overseas. Children have an obligation to care for their aged parents who have nurtured and educated them, even when it is difficult for them to do so. But people do not have an obligation to care for aged foreigners when it is difficult for them to do so—good though it is that they should do so. It is wrong to take away from someone something that belongs to them, but it is not wrong to take away from someone something that you have lent to them on the condition that you can take it back at any time. And so on. It follows that, if the omnipotent person is the sole cause of some person's existence, and he has made it clear that the gift of life is a temporary gift that he may take away at any time, it is not wrong for him to cause that person's death.

If there is an omnipotent God, others can give us good gifts only because God gives them the ability to do so by sustaining the laws of nature, and we can do or have what we do or have only for the same reason that God sustains the laws of nature. And God will have given each of us the gift of life itself directly, not via the operation of laws of nature. Our parents may have chosen to have *a* child, and the laws of genetics may have determined that that child would have a certain sex, skin colour, size, shape, and character. But nether your parents, nor natural laws, determined that that child should be you; the very same general laws could have determined that it would be me.[9] God alone will have determined that directly. So, if God has made it clear that human life is a temporary gift, he may take it away from any human (or any race of humans) at any time. And, if A has the right to take something from C, he surely has the right to allow some other person B to act as his agent in taking it away from C. So, if it would not be wrong for God to cause the death of some human, it would not be wrong for him to allow some other human to act as his agent in so doing. I have suggested earlier that 'it is always wrong to kill a human' is not a fundamental moral principle; it must be qualified at least by 'except to prevent that human killing some other human'. I now suggest that it must be qualified also by 'unless permitted by someone who has the right to take away that human's life when he chooses, in virtue of having created that human on condition of retaining that right'. The fact that all humans die after different lengths of life makes it clear that, if God created us, he created us for a temporary earthly existence of indefinite duration. Hence he has the right to take away that life and so to permit someone else to do so, if and when he chooses. (But, of course, in view of the great wickedness of killing without God's permission, anyone who seeks to kill someone because he believes that God permits him to do this would need to have very strong evidence indeed that God had given this permission.) More generally, if there is a God, he has

[9] Laws of nature are general laws stating that substances having such-and-such properties (e.g. an embryo formed from genes of certain kinds) would cause substances to have such-and-such other properties (e.g. the resulting child to have a certain skin colour, etc.). I argued, however, in Chapter 7 that a person is the person he is, is independent of whatever body he has and whatever mental properties (for example, his apparent memories and character) he has. Persons have a 'thisness' that makes them who they are. For fuller argument on this, see my book *Mind, Brain, and Free Will* (Oxford University Press, 2013), especially chs 1, 2, 3, 6.

rights over us that we do not have over each other; and I shall discuss some further such rights shortly.

It does not follow from that that God has no obligations towards us at all. Obligations arise when we explicitly undertake them, or do actions that implicitly commit us to them. To make a promise is explicitly to undertake an obligation, and so God is obliged to keep his promises. To give someone some information involves implicitly guaranteeing to them that what you are telling them is true. So God is obliged not to tell us what is false. More generally, I suggest, and have argued elsewhere,[10] if God creates sentient creatures (including humans and the higher animals), he puts himself under an obligation to give them a total life that as a whole is on balance worth living; and so, if someone's life on earth is not on balance worth living, God is under an obligation to provide for that creature a further life after death such that his total life is worth living. But note that if—as Christianity has normally assumed and as I have argued elsewhere[11]—it is not a unique best kind of action to create humans, God will have obligations towards humans only if he freely chooses to create them.

A Source of Moral Obligation

I now proceed to argue that, if there is a God of a kind that I have analysed so far, the existence and actions of God make a great difference to what are the contingent moral truths. Atheists and theists alike can come to recognize a necessary truth that everyone has an obligation to show gratitude to their benefactors, those from whom they have received gifts. As I have argued, if there is a God, he is our supreme benefactor; he gave to each of us the gift of life itself, and—via the operation of natural laws—he was largely responsible for us having all the good things that life contains. And, given the Christian doctrine (for which again I shall not argue here, although I have done so elsewhere[12]), that God became human in Jesus Christ in order to share our sufferings and to make

[10] See my *Providence and the Problem of Evil* (Oxford University Press, 1998), 229–36.

[11] See my *The Existence of God* (2nd edn, Oxford University Press, 2004), 119–20.

[12] For my arguments in favour of the doctrines of the Incarnation and the Atonement, see my short book *Was Jesus God?* (Oxford University Press, 2008); and the more substantial books *The Christian God* (Oxford University Press, 1994), and *The Resurrection of God Incarnate* (Oxford University Press, 2003).

atonement for our sins, we have abundant further reason for gratitude to him. Hence it becomes a duty to thank him abundantly; but properly to thank someone involves showing that you know who he is and what is his relation to you. You must take him seriously. So thanking God will involve rendering the kind of thanks appropriate to the all-good all-wise creator of the universe and all that it contains, including ourselves.

In most cases our obligations to human benefactors, even to those who gave us large gifts, are limited to saying 'thank you', perhaps giving them a small present in return, or helping them a little if they need help. Sometimes, however, human benefactors lay down a condition for the use of their gift. I may give a sum of money to one of my children on condition that he uses it to buy a house. He is not obliged to accept the gift on that condition; but if he does accept it, he has an obligation to fulfil the condition. Sometimes, however, the recipient of a gift subject to a condition is not able to understand the condition. Parents—and I mean parents who are not just biological parents, but are nurturing and educating parents—give a lot to their children. And, although they might not think of themselves as giving nurture and education to their children subject to a condition, there is nevertheless an implicit understanding that in return for the nurture and education the children will do certain things for them, both when the children are young and when the parents are old. When children are young, parents command them to do certain things—for example, to do the family shopping—and the command creates an obligation that would not otherwise exist. And, when the parents are old, the children have an obligation to care for them.

Parents are our greatest earthly benefactors. But, for the reasons that I have given, if there is a God, he is an incomparably greater benefactor. Hence our obligations to him are incomparably greater. Although God is never in the position of aged parents, we are in effect for all our life in the position of young children, totally dependent on him, having received from him the good gift of life itself while being at least for our childhood years in no position to choose whether or not to accept that gift. Since children who receive so many good things from their parents were in no position to accept or reject those things, they are rightly—in virtue of the goodness of the gifts—presumed to have accepted them, and to have accepted the obligations that accompany acceptance of the gifts. In view of the similarity of the God–humans situation to the parent–child situation, there must be a similar implicit understanding of our obligations

to God; and theistic religions teach that God does claim our obedience in consequence of creating us. The above argument shows his right to do this. The Book of Genesis pictures God as a creating man and telling him how to use his life—'Be fruitful and multiply', 'till and keep the garden', but do not eat the fruit of 'the tree of the knowledge of good and evil'.[13] And the major theistic religions claim that God has issued in the course of time more specific commands, among them the Ten Commandments. That we should fulfil God's commands is the condition under which he gives us life; and we who have used the life he gave us for many years must accept the condition under which we have been given it. God's commands—like the commands of a parent—impose on us obligations to do what he commands, obligations that would not otherwise exist. God's command makes it contingently the case that some action that would otherwise be only supererogatorily good or morally indifferent is now obligatory; and God's prohibition makes an action morally wrong, when previously it was only infravetatorily bad or morally indifferent. That there is a God is—I shall be arguing in Chapter 14—a metaphysically contingent truth (although, I shall be arguing, necessary in another way). So it becomes a contingent moral truth that we have a dominant obligation to express to God our gratitude for our life, and to obey his commands for how we should use that life.

There are limits to the rights of parents over children—parents do not have the right to command children to serve them day and night; and so, beyond a certain point, parental commands would impose no obligation. Likewise I suggest God's rights over us are also limited, even more narrowly than by the fact that he cannot command us to do what we are obliged (in virtue of some other necessary moral truth) not to do—for example, torture children just for fun. God has the right to demand a lot from us by way of worship and service to others—but, if he chooses to create free rational beings, I suggest, thereby he limits his right to exercise total control over their lives; and so there is this further obligation on God not to issue commands to us about what we should do every moment of our lives, an obligation like those discussed earlier arising from his free choice to create us. If there are such limits, it will then follow that, in virtue of his perfect goodness, God will not command us

[13] Genesis 1:28, 2:15–17.

to do actions beyond those limits—for to command what you have no right to command is wrong.

What God does not command, he may commend (that is, declare good, though not obligatory). And, since (perhaps up to a limit) it is supererogatorily good to please benefactors more than you are obliged to, God's commendation can make an action supererogatorily good, when it does not make it obligatory. And, because, being omniscient, God sees what is obligatory or supererogatorily good for reasons other than his command and commendation and we do not always, he can inform us which actions are obligatory or supererogatorily good for such reasons. But, given that there are limits to what God can *make* to be obligatory, there is scope for 'works of supererogation', as Catholic tradition has maintained in contrast to classical Protestantism.

In Plato's dialogue *Euthyphro*, Socrates asked the famous question: 'Is that which is holy loved by the gods because it is holy, or is it holy because it is loved by the gods?'[14] Put in theistic terms (and phrased simply in terms of command and obligation), the Euthyphro dilemma becomes: does God command what is obligatory for other reasons, or is what is obligatory obligatory because God commands it? Kant gave the simple answer of taking the first horn of this dilemma;[15] other thinkers in the Christian tradition (perhaps William of Ockham, and certainly Gabriel Biel[16]) have taken the second horn; but the view that I am advocating takes the first horn for some obligations and the second for others. It follows from the supervenience of the moral on the non-moral for which I argued earlier that there must be at least one necessary fundamental moral principle independent of the will of God. For, even if it were the case that all and only actions commanded by God are obligatory, that must arise because God has certain properties—for example, because he is our creator and perfectly good; and so the obligation to do what he commands would arise because of a necessary

[14] *Euthyphro* 9e.

[15] See Kant's *Lectures on Philosophical Theology*, trans A. W. Wood and G. M. Clark (Cornell University Press, 1978), 159: 'The knowledge of God . . . must not determine whether something is morally good or a duty for me. This I have to judge from the nature of things.'

[16] See his *Canonis Missae Expositio* 23E: 'The reason why the divine will accepts things as thus or thus, is not a goodness found independently in objects by God but the reason lies only in the divine will, which accepts things as having such and such a degree of goodness; that is why they are good in that degree and not vice versa.'

moral principle of the form 'whatever a perfectly good creator commands is obligatory'; and at least that one principle would be a necessary moral truth independent of the will of God. And that, in turn, makes it plausible that, as I have argued, there are other necessary truths (and so other contingent truths) of morality that make particular actions obligatory or good for reasons independent of any divine command. I suggest that we ought not to rape, or break a just promise (that is, one that we had the right to make) just because of what is involved in these actions, whether or not there is a God; here God can command us to do only what is our duty anyway. But only a divine command would make it obligatory to join in communal worship on Sundays rather than Tuesdays.

That there are very general principles of morality independent of the will of God was recognized by both Thomas Aquinas and Duns Scotus. Aquinas held that 'the first principles of natural law are altogether unalterable'.[17] He does not tell us much in the *Summa Theologiae* about which these are, but he does write that they are principles too general to be mentioned in the Ten Commandments, principles such as that no one ought to do evil to anyone, which he says are 'inscribed in natural reason as self-evident'.[18] Scotus tells us that the only moral obligations from which God could not dispense us are the duties to love and reverence God and only God; which he sees as constituted by the first three of the Ten Commandments.[19] But both writers also hold—and, I have claimed, are right to hold—that, as well as there being necessary moral truths independent of the will of God, many other human obligations arise from God's commands to us; so the will of God makes a great, but not a total, difference to what are the contingent moral truths.[20]

[17] *Summa Theologiae*, Ia.2a.94.5. [18] *Summa Theologiae*, Ia.2a.100.3.

[19] Ordinatio III, suppl. dist. 37, text and translation on pp. 268–87 and commentary on pp. 60–4 of Allan B. Wolter (ed), *Duns Scotus on the Will and Morality* (Catholic University of America Press, 1986).

[20] Aquinas holds that, while these fundamental moral truths are independent of the will of God, they are consequences of the nature of God. Following Augustine, he holds that the 'eternal law' is an 'idea' in the mind of God (*Summa Theologiae*, Ia.2ae.93.1), and that 'natural law is nothing other than the sharing in the divine law by intelligent creatures' (Ia.2ae.91.2). But in that case fundamental moral truths are dependent on the existence of God. But, if the existence of God is (in my sense) metaphysically contingent, as I shall be arguing in Chapter 14, it would follow that the fundamental moral truths could not be (in my sense) metaphysically necessary truths. Duns Scotus, however, holds that the fundamental moral truths such as 'You shall have no other gods before [God]' 'follow from their terms or as conclusions necessarily entailed by them'; for example, he seems to hold that

The mere existence of God makes acting morally always more important and sometimes very much more important than it would otherwise be. For not merely does the fact that his existence entails that he is our creator have the consequence that we have an obligation to give grateful worship to God, but it also has the consequence that it is good to live in the way he wants to live—just as it is good (if our parents are good parents and have true views about how it is good to live) to live in the way in which our parents want us to live; it is a further way of showing gratitude to them, good but perhaps not obligatory in the way that it is obligatory (up to a point) to obey their particular commands. God, being perfectly good, wants us to live good lives. It is for this additional reason good to fulfil our human obligations for a reason beyond the reason that we owe it to other humans to do so; and good too to benefit humans in supererogatory ways, for a reason beyond the reason that it is good for those humans that we should do so. Further, other humans (and indeed animals) are, like ourselves, God's creations—and so in a sense our brothers and sisters; hence our obligations to them are much stronger than they would be otherwise. So if we harm them, we harm their creator, God—just as, if I hurt your child, I wrong not merely the child but also you who have languished your love on her.[21] And, since each of us was created by God, we have an obligation to God (although not to ourselves) to care for ourselves.

It follows from the arguments of this chapter that—given that there is a being who is omnipotent in sense [ϵ], not merely will he be omnipresent, perfectly free and creator of the universe, and omniscient (in the

'You shall not have other gods before me' is true because it is entailed by 'If God exists, then alone he must be loved as God' (*Ordinatio* III, suppl. dist. 37). That is, he seems to hold that not merely are these logically necessary truths, but—as, for example, 'If God exists, then alone he must be loved as God'—they do not all depend on the actual existence of God for their necessity. But, given the existence of God, which, I shall be arguing in Chapter 14, Scotus held to be metaphysically necessary, then it would follow that the first three of the Ten Commandments, which concern our obligations to God, are also metaphysically necessary.

[21] Aquinas also argues that God's right to dispose of the material objects of the universe as he wishes is due to him being its 'owner', presumably in virtue of being its creator: 'What is taken by God's command, who is the owner of the universe, is not against the owner's will, and this is the essence of theft' (*Summa Theologiae*, Ia.2ae.94.5.ad.2). It follows from this that it is logically impossible for God to command someone to 'steal'—for, whatever God commands someone to take thereby becomes that person's temporary property, and so his taking it is not stealing.

weak sense), but also perfectly good and (both in virtue of his very existence and in virtue of whatever commands he has issued) a source of moral obligation—while he exists. But, of course, theistic religions suppose that he exists eternally, and I proceed to examine how that is to be understood in the next chapter.

12

Eternal and Immutable

God as Everlasting

Theists believe not merely that there is an omnipotent person, God, who exists now or has existed as long as created things, but that he is an eternal being. A natural understanding of this claim is that he has always existed, exists now, and will always exist—that there was, is, or will be no (period of) time at which he does not exist—and that he has always had, has now, and will always have, the properties that we have been considering. Let us express this understanding as the view that God is backwardly and forwardly everlasting. If, as I have argued, it is logically possible that an omnipotent person exists at the present time, then it would seem logically possible that he exists also at every other period of time. Then he would be backwardly and forwardly everlasting. Various writers have suggested that endless life would be tedious, boring, and pointless. An omnipotent person could, however, if he so chose, ensure that his life was not tedious or boring. And given, as I have argued, that there are true moral propositions, it would seem that there will always be very good actions that an omnipotent being could perform, and so his life would be far from pointless.

The doctrine that God has always existed entails that God did not ever begin to exist. What is it to begin to exist? There are two different ways of spelling this out. The first way to understand 'S began to exist' is as (1) 'S existed for some period of time after a period in which it did not exist'. The other way is to understand it as (2) 'S existed for only a finite number of (consecutive non-overlapping) periods of time of equal finite length (e.g. years)'. I stress the phrase 'of equal finite length'; everything that has existed for a finite period of time T has existed for a infinite number of (consecutive non-overlapping) periods of time—for example, for each of the intervals $\frac{1}{2}T$, $\frac{1}{4}T$, $\frac{1}{8}T$, and so on ad infinitum. In the case of every

ordinary constituent of the universe, such as some planet, if it has existed for only a finite number of years, there was an earlier period of time when it did not exist; and, if there was a time when it did not exist, it has existed for only a finite number of years.

But the universe itself (in any of the senses discussed in Chapter 8) having a beginning cannot be understood as it having existed for only a finite number of periods of time of the same finite length. For it makes sense to talk of two periods of time being of equal length only if a system of clocks could be constructed with different kinds of mechanism at different places within the universe that keep time with each other—so that, when an hour has passed by one clock of one kind of mechanism at one place, an hour has passed by any other clock of a different kind of mechanism at a different place. And that, of course, is (approximately) the present situation, at least within large regions of our universe; but it is possible only because the same laws of nature govern the behaviour of all physical objects including clocks everywhere in the universe (that is, in the most general respects all physical objects everywhere in the universe have the same powers and liabilities).[1] But it is logically possible that the universe could exist without being governed by laws of nature ensuring the regular behaviour of objects. Suppose that the universe existed for a period of time before the Big Bang, but that its constituents then behaved so chaotically that no such system of clocks could be constructed (and so there were no 'consecutive (non-overlapping) periods of time of equal length'), and that before that period there was no universe. Then evidently the universe had a beginning, and definition (1) has that consequence. But on definition (2) the universe would not have had a beginning—because it would have lasted longer than a finite number of periods of time of the same finite length. So, given that 'began to exist' must mean the same, whatever it is that is said to exist, the meaning of 'S began to exist' must be given by (1), and it can be a contingent matter only if, for most S, (2) is satisfied when (1) is satisfied. By a similar

[1] Given the normal interpretation of the equations of Special and General relativity, this cannot hold for star systems moving relative to each other. I argue that, despite this normal interpretation of these equations, there is in fact a universal cosmic time, so that clocks, not merely within a region but throughout the universe, (approximately) keep time with each other. See my 'Cosmic Simultaneously', in (ed.) W. L. Craig, and Q. Smith, *Einstein, Relativity, and Absolute Simultaneity* (Routledge, 2008); see also my Additional Note A.

argument 'S will cease to exist' must be understood as 'S will exist for some period of time before a period in which it will not exist'.

It follows that Time itself could not begin to exist, since 'Time began to exist' would be logically equivalent to 'Time existed for some period of time after a period of Time in which it did not exist'. But clearly it is logically impossible for there to be a period of time in which there is no time. It follows by a similar argument that Time could not end. If ever there is Time, it is without beginning or end. The Greeks generally saw a close connection between time and change.[2] Time, claimed Aristotle, is not the same as change, but it cannot exist without it.[3] This led the early Christian theologians, and in particular Augustine, to hold that Time began when the universe began.[4] That, I claim to have shown, must be false; if the universe had a beginning, Time existed before that. And, if God began to exist, Time would have existed even before that.

But theism claims that God did not begin to exist. Clearly that claim must be understood as the negation of 'God began to exist' on definition (1)—that is, in the way suggested earlier, as 'God existed for a period of time, and there was no earlier period of time when God did not exist'; that is, God existed for every past period of time. This allows for the possibility that, in earlier periods of God's existence, there was no universe, and so no laws of nature and no possibility of a system of clocks. In that case no period of God's existence would have been of any particular length, finite or infinite. For similar reasons God being forwardly everlasting is to be understood as him existing for every future period of time.

This discussion draws attention to the important distinction between the topology of time, and the metric of time. The topology of time is the succession of periods of time—first this period, then that period, then a third period. The metric of time is the measure of the length of these succeeding periods—this period lasted one year, that period lasted two years, and so on. Time must have a topology; for there to be time, there must be a succession of periods. But it need not have a metric—for some periods, there may be no content to a claim that one period lasted longer that another one; or to the claim that some period was of infinite

[2] See Richard Sorabji, *Time, Creation, and the Continuum* (Duckworth, 1983), ch. 6.
[3] *Physics* 218[b].
[4] *Confessions*, 11:10–14 and *De Civitate Dei* 11:5–6.

duration rather than finite duration—for only in terms of periods measurable by clocks can such a distinction be made. So, if God is everlasting, he must exist for every period of time; but any such period, whether or not the universe existed during that period, might seem to God no longer than our specious present. As the author of Psalm 90 wrote, addressing God: 'A thousand years in thy sight are but as yesterday.'

Given that God is everlasting, there must be in God a succession of distinct conscious experiences as long as there is a changing universe. For, given his omniscience (in the weak sense) at each period when the universe is in a certain state, not only does he he know its whole history up to that time but he knows that he cannot cause it to have been other than it has been, whereas he knows that he can cause any future state of the universe (which it would be good to cause). So, all the time, his knowledge of what in the history of the universe is uncausable and what is causable is changing. If the universe has not always existed, then before the existence of the universe God may still have had different conscious experiences at different periods; or, alternatively, he may have had just one qualitatively identical thought during the whole of that time, and so by creating the universe he would have brought into existence for the first time a succession of distinct states. But, whatever was the case with God during any time (if there was any such time) before the existence of the universe, by creating a universe governed by laws of nature, he caused there to be a metric time; and so his intentions, knowledge states, and thoughts occur at periods of time on that time scale. But that time scale, and indeed any succession of qualitatively distinct states of anything including himself, will have occurred only because he intentionally caused or allowed it to occur.

What I have just set out seems the natural way of interpreting the doctrine that God is eternal, and it is, I have urged, a logically possible one. However, there is in the Christian theistic tradition an alternative way of interpreting this doctrine, and I shall consider this alternative after considering the doctrine of God's immutability.

Immutability

Closely connected with the doctrine of God's eternity is the doctrine of his immutability. Theists have normally claimed that God is immutable, that he cannot change.

We can understand 'immutable' in a weaker or stronger way. All theists normally suppose that God has certain essential properties, including the properties discussed in the other chapters of Part II (apart from the property of being creator of the universe, which belongs to him only contingently—he did not have to create a universe). I shall discuss this doctrine that these properties are essential to God at length in Chapter 13. But meanwhile suppose that God is essentially (that is, necessarily) omnipotent, omniscient, perfectly good, and so on. Then it follows that he is immutable in the weak sense of being unable to change in respect of these properties. And, if God is essentially everlasting, he would be who he is only if he had always existed and always would exist.

Many theists have, however, wanted to claim that God cannot change, not merely in respect of his essential properties, but in any respect at all. I do not think that that is compatible with him being everlasting. So what is it for someone to 'change'? There is a famous but clearly unsatisfactory criterion of 'change' that P. T. Geach called 'Cambridge' change.[5] According to this criterion, a substance x changes iff some predicate 'ϕ' expressing a property applies to it at one time, but not at a later time. Thus my tie has changed if it was clean yesterday, but is not clean today. But, although everything that 'changes' in the ordinary sense also 'changes' by the Cambridge criterion, the converse is not true. Sometimes a predicate 'ϕ' applies to a substance x at one time but not at another time without that substance having 'changed' in the ordinary sense of the word. Socrates may at one time be thought about by Smith and at a later time not be thought about by Smith, without Socrates having changed. It is Smith who has changed. Or at one time John may be taller than James and at another time John may be not taller than James—without John having changed at all; it may be simply the case that James has grown.

Real change must be distinguished from mere Cambridge change. A real change in a substance is one that is due to a change in its intrinsic properties, these being ones that the substance has independently of its relations to any other existing substances. A substance S changes iff that change consists in S being ϕ at one time and S being not-ϕ at a later time, when ϕ is an intrinsic property. So 'John has become taller than James'

[5] P. T. Geach, 'What Actually Exists', *Proceedings of the Aristotelian Society,* suppl. vol. 42 (1968), 7–16; repr. in his *God and the Soul* (Routledge and Kegan Paul, 1969), 65–74; see pp. 71–2.

will constitute a real change in John only if it is due at least in part to John becoming taller than he was; otherwise it does not constitute a real change in John.

So the claim that God cannot undergo real change would not rule out God not being worshipped by Augustine at one time and being worshipped by Augustine at a later time—for the real change is not in God, but in Augustine. But it would rule out God at one time believing that some event had not yet occurred and then at a later time believing that the event had occurred. Yet, as I argued earlier, if God is everlasting, inevitably his knowledge of, and so his beliefs about, what is unalterable and so past, and of what is causable and so future will change. That would be so, even if God had predetermined the whole history of the world before he ever caused it to exist. And, if God creates any free agents, for the reasons analysed in Chapter 10, he will have totally confident beliefs about what they will do freely only after they have done it. If, despite these (to my mind) insuperable problems, God were immutable in the strong sense, he would be a very lifeless being. The God of the Hebrew Bible, in which Judaism, Christianity, and Islam all have their roots, is pictured as bring in continual interaction with humans—humans sin, then God is angry, then humans repent, then God forgives them; humans ask God for this, then God gives them this, then they misuse it, then God takes it away; and so on. A totally immutable God is a lifeless God, not a God with whom one can have a personal relationship—as theists have normally claimed that one can have with God.

However, like every other substance, God could not change in respect of his essential properties. To anticipate the discussion in Chapter 13, I shall find the view that God is essentially everlastingly omnipotent, and so omniscient (in the weak sense) and perfectly good, a clearly coherent view. This would have the consequence that God is immutable in that, if he exists, necessarily he always exists and is always omnipotent, and so omniscient (in the weak sense) and perfectly good. Because he is omnipotent and perfectly good, he is reliable and totally loving. He keeps his promises, tells us only what is true, always seeks our well-being. In such ways he would indeed be immutable.

Why should many theists have wished to suppose that God is immutable in the strong sense? The belief that God is immutable in this sense does not seem to me to be much in evidence in Christian tradition until the third or fourth century AD. It must have come from the philosophy of

Neoplatonism, which had a considerable influence on much early Christian theology. For a Platonist things that change are inferior to things that do not change. Aquinas, claiming that God is altogether immutable, gives as one of his reasons that 'anything in change acquires something through its change, attaining something not previously attained. Now God . . . embracing within himself the whole fullness of perfection of all existence cannot acquire anything.'[6] Being perfect already, he can lack nothing. However, an obvious response to this point is to suggest that the perfection of a perfect being might consist not in his being in a certain static condition, but in his being in a certain process of change. Only Neoplatonic dogma would lead us to suppose otherwise. That God is completely changeless would seem to be an unnecessary dogma for theism. It is not, I have suggested, in any way implicit in the Old or New Testaments. Nor, I would think, is it one to which very many modern theists are committed, unless they have absorbed Thomism fairly thoroughly.

Timelessness

Why should anyone find the view of God as everlasting unsatisfactory? Here again it was Neoplatonist philosophy whose low view of temporal things, as of changing things, influenced Christian thought. The fifth-century CE philosopher Boethius, who provided a classic statement of the rival view of God's relation to time to which I shall turn shortly, claimed that an everlasting God would be an imperfect being. He wrote: 'Whatever lives in time, while it is present, proceeds from past to future, and there is nothing in time so constituted that it can embrace the whole space of its life at once. It has not yet apprehended tomorrow, but it has already lost yesterday; and you do not live in today's life any more fully than in that moving and transitory moment.'[7] Boethius seems to think that time would, as it were, exist outside a merely everlasting God, who would be caught in its stream. The cosmic clock would tick inexorably away, and God would be unable to do anything about it. More and more of history would be becoming past, accessible to God only by remote memory, and unaffectable by any action of his. God could act only at the

[6] *Summa Theologiae*, Ia.9.1.

[7] Boethius, the *Consolation of Philosophy*, 5.6.

present period of time, and his lordship of the universe would be confined to the time of his action. Let us call that view the view of God as 'time's prisoner'. That view, Neoplatonism claimed,[8] involved too low a view of God.

So theologians took over from Neoplatonism, together with the view that God is immutable, the view that God is outside time; he is timeless. Origen expressed that view at the beginning of the third century,[9] and it became the normal view when Augustine expounded it at the end of the fourth century. Thereafter it was taken for granted in Western theology for the next thousand years, and is still taken for granted by most Catholic theologians today. The view was given its classical exposition in Boethius's definition of God being eternal as his having 'the complete possession all at once of illimitable life'.[10] Everything God knows or does is done all-at-once in a timeless moment that has no beginning or end. At that one moment, according to Boethius, he knows (*totum simul*, all at once) everything that happens on earth at every period of time, both what is past and what is future relative to us; and at that one moment causes effects that happen at periods of time that, relative to us, are past or future. God's knowledge includes knowledge of all human free actions. But, since his eternal present is not 'before' the time of any human actions, he *fore*knows no human action. Hence, Boethius claims, his knowledge of that action is no more incompatible with the action being free than is our observation of someone else's immediately past action incompatible with it having being free. Likewise the impossibility of backward causation imposes no limit on the times of the effects that God can cause. For God's 'eternal present' is later than no time of any state of affairs. Aquinas compared us to travellers moving along a road.[11] The stages on the road are the periods of time through which we pass. We cannot see or act except at the stage at which we are. But God is like an observer standing on the mountain who can see the whole road (all of

[8] For the Greek origins of the understanding of eternity as timelessness, see Sorabji, *Time, Creation, and the Continuum*, ch. 8.

[9] 'The phrase which we use . . . that there never was a time when [The Son] did not exist, must be accepted with a reservation. For the very words, when, or never, have a temporal significance, whereas the statements we make about The Father and The Son and The Holy Spirit must be understood as transcending all time and all ages and all eternity' (Origen, *De Principiis*, 4.4.1 (Latin version), trans. G. W. Butterworth (Harper & Row, 1966)).

[10] Boethius, *De Consolatione Philosophiae*, 5.6.

[11] *Summa Theologiae*, Ia.14.13.ad.3.

time) in one glance. 'From eternity he was the sufficient cause of the world'[12]—that is, he caused it and all that happens in it, but not by acting before (in the normal temporal sense) it existed.

However, the Hebrew Bible shows no knowledge of the doctrine of divine timelessness; for its authors God does now this, now that; now destroys Jerusalem, now lets the exiles return home. The same applies in general for the New Testament writers, although there are occasional sentences in the New Testament that just might be interpreted in terms of the doctrine of divine timelessness. Thus in the book of Revelation of St John, God is represented as saying 'I am the Alpha and the Omega . . . who is, and who was, and who is to come', 'I am the Alpha and the Omega, the first and the last, the beginning and the end', and 'I am the first and the last, and the Living one'.[13] But it seems to me to be reading far too much into such phrases to interpret them as implying the doctrine of divine timelessness. St John of Damascus, the Eastern Christian theologian, who wrote in the ninth century CE what may be regarded as the first great Summa, an exposition of all Christian doctrine, pays no attention to it, and, by describing God as προαιώνιος, 'existing before the ages',[14] might be suggesting that God is everlasting. And St Gregory Palamas, the fourteenth-century theologian who, more than any other theologian, has influenced modern Eastern Orthodox thought, seems to deny that God's causal activity is timeless. He wrote that 'beginning and end must be ascribed, if not to the creative power itself, then at least to its activity—that is to say, to its energy as directed towards created things. Moses showed this when he said, 'God rested from all the works which he had begun to do'.[15] This is a clear acknowledgement of temporal succession in the actions of God, and not merely in their effects, and so involves a rejection of the timelessness doctrine. The doctrine seems to have had comparatively little influence on Protestant theology, and much recent Protestant theology explicitly rejects it.[16]

[12] *Summa Theologiae*, Ia.46.1. [13] Revelation 1:8, 22:13, 1:17–18.

[14] John of Damascus, *Exposition of the Orthodox Faith*, 2.1.

[15] Gregory Palamas, *Triads*, III.2.8.

[16] For a very fair history of the doctrine of divine timelessness in Christian thought, and analysis of the problems with it, see Nelson Pike, *God and Timelessness* (Routledge, 1970). For doubt whether even all Western theologians of the middle ages were committed to a doctrine of divine timelessness, see R. Fox, *Time and Eternity in Mid-Thirteenth-Century Thought* (Oxford University Press, 2006). It is disputed whether Duns Scotus accepted this doctrine; for argument that he did accept it, see Richard Cross, *Duns Scotus on God*

As I wrote at the beginning of this section, the major reason why Christian theologians from the third or fourth century onwards felt that the interpretation of God's eternity as everlastingness was unsatisfactory was that it seemed to make God 'time's prisoner', and so less worthy of our worship. There are indeed proper reasons why humans regret the passage of time. Humans get older and so weaker, new experiences are not as exciting as old ones, and all the time humans draw nearer to their death, beyond which, they fear, they will not live again. But these are mere contingent consequences of the passage of time for mortal finite humans; an omnipotent being need not suffer them. Yet, as I noted earlier, even for an omnipotent being the passage of time would involve more and more events becoming fixed for ever and no longer affectible, and accessible only by memory. Yet, since he can still cause and be aware of an infinite number of future events, and since his memory of the past would be infallible, why should the increasing number of fixed events matter; by creating and sustaining the universe God would have added to the number of good events—and that is a matter for rejoicing, not regret. True, if God performed a certain action *A* on one day, he could not perform numerically the same action on another day—he could perform only an action qualitatively similar to it. But what real loss does this fact mean? If tomorrow I can be in a state and do actions qualitatively as similar as I like to those of today, why should the passage of time cause me regret? And, I now suggest, for a timeless God every period of time would be beyond his power to control. In his timeless moment such a God would see the world as it is, and he could not then make it any other way, whereas an everlasting God could control an infinite future.

Theologians had two further positive reasons for advocating the doctrine of divine timelessness. The first is that this doctrine would provide backing for and explanation of the doctrine of God's total immutability. For, if God is timeless, he is totally immutable—although it does not follow that, if he is totally immutable, he is timeless. Aquinas

(Ashgate, 2005), esp. 121–3. Pike's book concluded with his remark that he had not been able 'to find any basis for [the doctrine of divine timelessness] in biblical literature or in the confessional literature of either the Catholic or Protestant churches' and he quoted Garrigou-Lagrange as pointing out that the doctrine of timelessness is '*not* a dogma of the catholic faith' (R. Garrigou-Legrange wrote as a Catholic writer, at a time when Catholics had a wide and fairly clear view of what constituted 'a dogma of the Catholic faith').

seems to have thought that the latter did follow: 'something lacking change and never varying its mode of existence will not display a before and after'.[17] God's eternity (in the sense of timelessness), he claimed, 'follows upon unchangeableness, and God alone . . . is altogether unchangeable'.[18] However, this seems mistaken. A totally immutable thing could just go on existing for ever without being timeless—especially if other things, such as the universe, changed, while the immutable thing continued changeless. The change of other things would measure the passage of time during which the immutable thing did not change. Still, the timelessness of God would explain God's total immutability, if he really was totally immutable. But we have seen no good reason why the theist should advocate God's total immutability.

The second reason why theologians adopted the doctrine of timelessness is, they supposed, as we saw for Boethius, that it allowed them to maintain that God is omniscient in the strong sense that was discussed in Chapter 10. If God is to know all our actions, those actions must cause God's beliefs that they occurred; without such a causal relation, it would need an extraordinary coincidence to sustain a correlation between God's beliefs and our uncaused actions. The principle for which I argued in Chapter 9 and used in Chapter 10, that backward causation (a cause acting later than its effect) is impossible, rules out our actions causing God having invariably true beliefs about those actions at an earlier time. But it does not rule out our actions causing God's timeless beliefs. So it might seem that Boethius can still claim that, since our actions are never future for God; God can see our actions as present and that this would not endanger their free character. God outside time can never not know our free actions, even though they may sometimes be future from our point of view.

However, the doctrine of God's timeless knowledge of free human actions is normally expounded, as by Boethius and Aquinas, as involving the claim that God sees temporal events 'as present'—that is, as they happen; to use the expression coined by Stump and Kretzmann,[19] God's knowledge of all events is 'co-occurrent' with the occurrence of those events. But what could 'co-occurrent' mean except 'simultaneous with'? So understood, human actions would cause God's knowledge simultaneous with them, which is ruled out by the arguments of Chapter 9 to the effect that

[17] *Summa Theologiae*, Ia.10.1. [18] *Summa Theologiae*, Ia.10.3.
[19] E. Stump and N. Kretzmann 'Eternity', *Journal of Philosophy*, 78 (1981), 429–56.

both backward and simultaneous causation are impossible. Further, if we were to allow the possibility of simultaneous causation, God would have to be aware simultaneously of all the events of human history that happen at different times as they happen. But how could God be aware at his one timeless moment of two events happening at different times, unless the two awarenesses are simultaneous with each other, and so two events happening at different times would have to happen at the same time—which is logically impossible. How could God be aware of the destruction of Jerusalem by the Babylonians in 587 BCE as it happens, and of its destruction by the Romans in 70 CE as it happens, when these two times are not simultaneous with each other? Any sense of 'simultaneous' in which this is logically possible would seem to have little connection with the ordinary sense of 'simultaneous'.

Stump and Kretzmann have tried to make sense of a special kind of simultaneity in which events in human history can be said to be 'simultaneous' with God's knowledge of them without being 'simultaneous' with each other. They point out that, according to the normal interpretation of the equations of the Special Theory of Relativity, simultaneity is relative to a frame of reference. An 'inertial frame' is a material body whose parts are all stationary relative to each other, and is not subject to external forces such as gravity. It was an empirical discovery that in each of two inertial frames moving relative to each other in empty space at a constant velocity, the 2-way velocity of light (its average velocity from a point P to a mirror M at which it is reflected back to P) is the same in both frames—*c* (approx 300,000 km/sec). If we reasonably assume that the 1-way velocity in each frame is the same as the 2-way velocity (that is, it takes the same time to travel from P to M as to travel back from M to P), and set clocks at different places in each frame of reference on that assumption—for example, if a light signal leaves P at 10.00 and arrives back at 10.02 on the clock at P, we set the clock at the moment it arrives at M at 10.01—then a strange result follows. This is that any two events measured in one frame as simultaneous (for example, the event that happened at P at 10.01 on P's clock, and the event of the light arriving at M) will not be simultaneous in the other frame. We can, therefore, speak only of 'simultaneous in frame F_1', or 'simultaneous in frame F_2'. With this analogy in mind, Stump and Kretzmann define a notion that they call 'ET-simultaneity', which has the consequence that all events in time are ET-simultaneous with the one eternal event, without being simultaneous (in the normal sense) with each other.

The analogy from Special Relativity will not, however, serve Stump and Kretzmann's purpose of beginning to make 'ET-simultaneity' intelligible. For—see Additional Note A—the equations of Special Relativity do not need to be interpreted in a way that uses the notion of simultaneity relative to a frame of reference; and, even if they are so interpreted, it remains the case that in every frame a cause is earlier than its effect. So the analogy cannot support a sense of 'simultaneous' in which one temporal event that causes another one is earlier than or temporally simultaneous with the latter in one frame but later than it in another frame. Hence—on the Special Relativity model—if God causes an event yesterday, God's causal action must be earlier than that event in every frame. I conclude that the 'relative simultaneity' of the theory of relativity does not provide a very good 'introductory analogue for our characterization of ET-simultaneity'.[20] It remains totally unclear what it would mean for an event on earth yesterday and an event on earth tomorrow both to be 'simultaneous' with the same event, and in particular the event of a person causing them or being aware of them. Any sense of 'simultaneous' in which this is logically possible would not seem to be 'analogous' to the ordinary sense in the sense of 'analogous' analysed in Chapter 4, but to have little connection with it, except in the respect that it is a relation between periods or instants of time that entails that these are neither before or after each other; none of the connections of 'simultaneous' with the rest of our conceptual scheme would remain.

It is not possible to save the doctrine of God's timelessness by abandoning the explicit claim that God's knowledge of all events is 'co-occurent' with the occurrence of those events, and claim instead that God knows all events at a timeless moment that has no temporal relation to the times of the occurrence of the events. This is because, if God's knowledge of a human free action is not to be an enormous lucky accident, those actions must cause God's knowledge that it occurred. Now, either this causal relation is direct (that is, the action is the direct cause of God coming to know about it), or the action causes some other mundane event that directly causes God coming to know about it. Either way, this process involves the direct causation of God's knowledge by a mundane substance. I argued in Chapter 9 that directly causing or

[20] Stump and Kretzmann, 'Eternity', 440.

'fixing' an event must continue over a period that includes both the non-existence and the existence of the event. So the mere occurrence of a causal relation between a human action and God coming to know about it entails that some part of the event of God's knowledge occurs at the same time as some mundane event, and so must be an event in time.

A similar result follows from the doctrine of God as creator and sustainer of the universe. This, given my earlier construal of laws of nature, entails that God causes mundane substances to retain their causal powers and liabilities. Now, for any given mundane substance, either this causal relation between God and the mundane substance is direct, or God causes some other mundane substance to retain its causal powers and liabilities, which include the power and liability to cause the former substance to retain its causal powers and liabilities. Either way—by the argument of Chapter 9—it follows that, at any time *T*, God directly causes a mundane substance to continue to have the same powers as previously by acting on it both when it does not have those powers at *T* and when it does. But, in acting when the substance does have the powers that it has at *T*, God is acting at *T*. So part of God's direct action in conserving the powers of mundane substances involves God acting simultaneously with the existence of those powers in the substances. So, analogously to the case of God's knowledge, the mere occurrence of a causal relation between a part of God's action and a mundane effect entails that some of the action must occur at the same time as the event caused, and so must be an event in time. God could know only that Jones will freely mow the lawn if part of his coming to know this is simultaneous with Jones's intention to mow the lawn or with another mundane event caused by Jones's intention; and God can cause an event on earth only if part of his causal action is simultaneous with the occurrence of that event or with another mundane event that causes that event. And, since God acts and knows throughout the history of the universe, much of God's life must be a temporal life.

But it seems impossible to give any sense to the view that each of God's actions of causing mundane events and each of the events of God acquiring knowledge has a part that is partly temporal and a part that is partly timeless, since the continuity of the parts in each case seems necessary for the occurrence of the action or other event. I conclude that it seems almost impossible to give any sense to the view that there could

be a timeless God who knows what is happening in the physical universe and causes events in that universe.

Even if a theist could make sense of the doctrine of divine timelessness, Christians have the further reason for denying it—that it seems incompatible with the picture of God as in constant interaction with ourselves, a picture that seems important for the Christian religious life. On that picture, as I pointed out earlier in criticizing the view that God is immutable, first humans sin, then God is angry with them, then they repent, then God forgives them. On the timelessness view, God in his one timeless moment is aware of all that humans do, angry at their sinning, forgiving them as they repent. He is not responding to us; his situation is the same as if he was in time and foreknew all the actions that we would do and had prepared in advance how he would respond to them. He would be like a parent who left his children in the house, knowing exactly what they would do when, with a disc already recorded playing in the house, on which he would announce as the children acted, his varying reactions to each of the actions that he knew that they would do. Such a God would not be a God in interaction with ourselves; real anger at our sin is anger without infallible knowledge that we would subsequently repent; real forgiveness involves a new unplanned reaction to the repentance. And the Christian doctrine of the Incarnation, that at a particular moment of history (about 4 BCE) God, the second person of the Trinity, took a human nature in addition to his divine nature, and lived a human temporal life for some thirty years of human history, is especially difficult to reconcile with the view that, 'simultaneously', he was living his timeless divine life.

For Hegel the Absolute or God is essentially something in process. Tillich acknowledges his debt here to Hegel, by claiming that Hegel's 'idea of a dialectical movement within the Absolute is in agreement with the genuine meaning of eternity. Eternity is not timelessness.' Tillich claims that God is not outside the temporal process, for, if he were, he would be lifeless. Only a God who acts and chooses and loves and forgives is the God whom we would wish to worship, and the pursuit of these activities, since they involve change of state, means being in time. 'If we call God a living God, we affirm that he includes temporality and with this a relation to the modes of time.'[21] Exactly the same point is

[21] P. Tillich, *Systematic Theology* (James Nisbet, 1953), i. 305.

made by Barth,[22] though he argues not only from the general fact that God is a living God, but also from the particular fact of the Incarnation. The Incarnation means, according to Barth, that God acts at a particular temporal moment. Only a temporal being can do this. 'Without God's complete temporality the content of the Christian message has no shape.'[23] In this respect it seems to me that modern Protestant systematic theology has had the correct insight.

The theist's only hope for maintaining the logical possibility of his claim that God is timeless and its logical compatibility with others of his claims would be to maintain that many words are being used in highly analogical senses. When the theist says that God is a 'person' or 'causes' states of affairs, or 'knows' what happened yesterday 'at the same time as' he 'knows' what happens tomorrow and that he 'knows' all these things at and only 'at the same time as' they happen, the theist could claim that the words involved here are being used in highly stretched senses, so that there is no incoherence in what is being said and no incompatibility with other things that the theist wishes to say. When discussing the analogical use of words in Chapter 4, I warned that, although a theist would be justified on occasion in using one or two words in an analogical sense, nevertheless too many appeals to analogical senses of words would make the sentences in which the words were used empty of content. In this case it seems to me that the theist has no need to make such an appeal. For, as I have been urging, the theist has no need to incorporate the doctrine of the timelessness of God into his theism. The theist can easily do without this doctrine and all the difficulties that it brings, and rely instead on the simple and easy coherent understanding of God's eternity as everlastingness, which I delineated earlier, an understanding that fits better with Christian doctrine and religious practice.[24]

If a person omnipotent (in sense [ϵ]) is everlasting, it follows that at each period of time he will be the creator of any universe there is during

[22] Also by O. Cullman in *Christ and Time* (SCM Press, 1951), pt I, chs 3, 4. Cullman owes an obvious debt to Barth.

[23] K. Barth, *Church Dogmatics*, II (i) (T and T Clark, 1957), p. 620.

[24] The doctrine of the timelessness of God is connected in Aquinas's system of thought with various connected doctrines, expressed in Aristotelian terminology, such as that God is 'pure act and unalloyed with potentiality' (*Summa Theologiae*, Ia.9.1). There seem to be similar reasons for adopting or rejecting these doctrines, as for adopting or rejecting the doctrine of timelessness.

that period, and so he will be the creator of any universe that there ever is, and so of our universe. Any other being who creates (or sustains) anything during that period will be able to do so only because the omnipotent person allows it to do so.

Deity

Apart from the property of necessary existence, I have now considered all the main properties traditionally ascribed to God. I argued in Chapter 9 that it followed from a person being omnipotent in sense [ϵ] (as also in most other senses) that he has the properties discussed in Chapters 7 and 8—that he is an omnipresent spirit, perfectly free, and creator of any world there is. I argued in Chapters 9 and 10 that it follows from omnipotence in sense [ϵ] that he is omniscient in the weak sense; and in Chapter 11 that he is perfectly good (in the sense defined there) and a source of moral obligation. I then considered the property of eternity, and argued that this must be understood as everlastingness; and that it is logically possible and so coherent that there be an everlasting omnipotent being. So a person who is everlastingly omnipotent will have all the other properties which the Judaeo-Islamic–Christian God is traditionally supposed to have—being eternally an omnipresent spirit, perfectly free, omnipotent, omniscient, perfectly good, a source of moral obligation, and creator of any universe. Such a person I shall call a 'deity'. The divine properties are not just a collection of unrelated properties; they all follow from everlasting omnipotence.

The arguments of Part II have been arguments designed to show that the concept of a deity is a coherent one—so long as these properties are understood in the ways analysed in this chapter, and in particular so long as 'omniscient' is understood in the weak sense and so long as 'eternal' is understood as 'everlasting'. But the Judaeo-Islamic–Christian God is supposed to have all these properties essentially—that is, to be necessarily a being of this kind; and in some sense to exist necessarily. In Part III I proceed to examine whether these further claims are coherent.

PART III

A Necessary God

13

God's Necessary Properties

Both a 'Person' and a Supreme 'Form'

The argument of Part II has been that it is logically possible that there exists an eternal omnipotent person, so long as 'eternal' is understood as 'everlasting', and 'omnipotent' is understood in sense [ϵ], from which it follows that he is an omnipresent spirit, perfectly free, the creator of any universe, omniscient (in the weak sense), perfectly good, and a source of moral obligation. Such a person I have called a deity. My argument has in no way relied on supposing that words are used in analogical senses. I have supposed that the words used above to denote the properties of the person are used in perfectly ordinary senses or are defined by words that are so used. However, for the reasons given in Chapter 2, my proof of this logical possibility may not be accepted by all reasonable people; they may not find my detailed spelling-out of the circumstances in which it holds logically possible, and they may not find my claims about what entails what cogent. The only way to convince such opponents would be by yet more detailed argument, and the size of this book precludes that. Nevertheless, I hope that I will have convinced many reasonable people. But God has always been supposed to have the properties analysed in Part II essentially, and to be in some sense a necessary being. I shall consider in this chapter whether it is logically possible that there can be a being who is essentially a deity, a being of a kind such that he could not exist without having all the properties of a deity. These properties include being everlasting, and so, having this property essentially, he could not exist unless he always had existed and always would exist. I shall then go on to consider in the next chapter in what sense of 'necessary' it is logically possible and so coherent to suppose that such a being can be a necessary being.

A person omnipotent in the sense [ϵ] could always remain omnipotent for ever if he chose continually so to remain, and he could always so

choose unless his perfect goodness required him to abandon his omnipotence. Maybe it would be an equal best act either to remain omnipotent or to abandon his omnipotence. In that case he could be omnipotent until a time *t*, but then cease to be omnipotent. To repeat the point made in Chapter 9, that could happen only if that person permitted it to happen—for, being omnipotent, he could always bring about his own continued existence (including doing so by preventing any other being from bringing about his non-existence). Also, unless it would be a non-best action to do so, he could deprive himself (or allow some other being to deprive him) not merely of his omnipotence but even of his existence. He could make a stone too heavy for himself to lift, or commit suicide. If every such action would be less good than the best action of keeping himself in existence and omnipotent, then any omnipotent being would be necessarily (that is, essentially) omnipotent and forwardly (but not necessarily backwardly) everlasting, in the sense that his being omnipotent at one time entails his continuing to exist as an omnipotent being for ever.

The concept of a person who exists at a time and is (at that time) essentially omnipotent and forwardly everlasting might seem at first sight not too problematic, whether or not this property follows from his perfect goodness or whether it is an independent property. It could follow directly from his nature (rather than via his perfect goodness) that inevitably he will at each period of time cause himself to go on existing, and so he will continue to exist for ever. But, given the impossibility of backward causation, how can a substance have a nature now, of such a kind as to determine that it existed in the past with the same nature? The present nature of some substance determines the kind of past it can have had—if it had a past. If my desk existed twenty years ago, of logical necessity it was composed then of most of the same matter as composes it now, or of matter that has been gradually replaced by its present matter; otherwise what existed then would have been a different desk. But it seems that any substance other than God (as he is supposed to be) could—it is logically possible—have come into existence at any time. Essential backward everlastingness is problematic in the way that forward everlastingness is not.

However, I now argue, if a theist wishes to maintain that God is essentially backwardly (as well as forwardly) everlasting, God can be a 'person' only in an analogical sense of that word. I wrote in Chapter 7 that God is often supposed to be a 'person' in the mundane sense of that word;

and nothing discussed in the rest of Part II required any qualification to be put on that. But, I argued in Chapter 7, what makes a person at one time the same person as a person at a later or earlier time is ultimate—it cannot be analysed in terms of continuity of body or of any physical or mental properties, such as apparent memories; each person has a 'thisness' that is necessary and sufficient to distinguish him from any other person. So, if God is a person, what makes him that person should also be ultimate, and he would be the person he is whether or not he gained or lost power or knowledge. Yet, if God is essentially backwardly everlastingly omnipotent and so had essentially the properties entailed by that, he would not be the same person if at some earlier time he had had less power. If a being began to be omnipotent or began to exist, he would never ever be God. And not merely on the traditional view does God have eternally to have had and to continue to have his essential omnipotence, in order to be God; but those theologians of the later patristic tradition who considered this issue in effect deny that God has thisness. They claim that a world could not be different in that a different God was in charge of it. Any world in which there was a being with all the same essential properties as God (both those considered so far, and any other essential properties he has) would be a world in which the same God was in charge. Augustine claimed that 'God is improperly called substance', but 'He is truly and properly called essence',[1] which seems to entail that there is nothing more to him than his properties; and so that he does not have thisness. And Aquinas explicitly wrote that it is 'in virtue of one and the same fact that he is God and this God'.[2]

The view of God who is what he is in virtue of being in control at all times of everything that happens, and not in virtue of a 'thisness' (as defined in Chapter 7) that makes him a particular person, suggests a different model for God, as a 'supreme form'. Plato held that the forms or 'ideas', the essences of things situated outside the world of change, determine how particular changing substances behave; and he suggested that there was a supreme form, the Form of the Good, that determines everything.[3] A 'form' in Plato's sense is a property; the form of an

[1] *De Trinitate*, 7, ch. 5. [2] *Summa Theologiae*, Ia.11.3

[3] See, among other places, Plato, *The Republic* 508e–509b, where the form of the good is said to be 'the cause of knowledge and truth. Then you may say of the objects of knowledge that not only their being known comes from the good, but their existence and being also

individual table is just 'being a table', and the form of the good is just goodness itself. Hence forms do not have any underlying thisness; there could not be two forms of 'being a table' different from each other. Influenced by Plato, some of the early Christian theologians thought of God as this Form of the Good; and this, understood without qualification, would involve thinking of God as nothing but a changeless impersonal principle. The modern equivalent of such a timeless principle is a law of nature on (Tooley's version of) the RBU understanding of 'a law of nature', described in Chapter 8, according to which laws of nature are changeless entities independent of the substances governed by them. There could not be a different law of gravity other than the actual one, but one that had the same effect on physical objects. And, if it was really a *fundamental* law of nature (and not a regularity that holds only under certain conditions, or one that holds only because God allows it to hold), and was a reality independent of the physical objects that are constrained to act in accord with it, then it must hold for ever. On the view of God as a supreme form, he plays the role that atheist scientists ascribe to the fundamental laws of physics (on the RBU account). Any law of this kind that began to hold or ceased to hold or changed its mode of operation would never have been a fundamental principle governing nature.[4] If we think of God as a supreme form, he would inevitably be not merely forwardly but backwardly everlasting.

To claim that there is a kind of 'person' who is who he is in virtue of his essential properties and who lacks thisness is at last to appeal to analogy in order to make sense of our talk about God. Although the theological tradition described in Chapter 5 claimed that almost all talk about God is analogical, it seems to me unnecessary—for reasons given at various places earlier in the book—to hold that. There is no need to deny that 'knows' some proposition carries the same implications in 'God knows', as it does in 'Socrates knows', that proposition—for example, that he believes that proposition, is justified in believing it, and that his justification does not

come from it, though the good is not itself being but transcends even being in dignity and power' (*The Republic,* trans. A. D. Lindsay (J. M. Dent and Sons Ltd, 1935).

[4] I am not advocating the RBU account of laws of nature, For reasons that I give in my *Mind, Brain, and Free Will* (Oxford University Press, 2013), 137–40, I believe that the SPL theory (see Chapter 8 of the present book) is the correct theory of laws of nature. But I am using it as an analogy to illustrate what the theory of God as a fundamental determining principle, or the supreme Platonic Form of the Good, would amount to.

rely on some false proposition. God's knowledge is infallible, while Socratess knowledge is not; but they both have knowledge in the same sense. Although 'God knows that *p*' entails 'God knows infallibly that *p*', it is not of the nature of knowledge to be fallible or infallible, but the infallibility of God's knowledge is entailed by it being God who has it. Likewise in 'God believes that *p*' and 'Socrates believes that *p*', what is meant by 'believes' is the same. But 'God believes that *p*' entails '*p*' (that is, that '*p* is true'), whereas 'Socrates believes that *p*' does not entail '*p*'.

But, in order to make sense of how God can be both a 'form' (or something like a law of nature on the RBU account) and also a 'person', we need to modify the semantic and syntactic rules governing 'person', in the way analysed in Chapter 4. To do this, we retain the same paradigm examples of 'persons', but insist that, in order to be a 'person', some being needs only to resemble the paradigm examples more than it resembles objects that are clear cases of 'non-persons', but does not need to resemble the paradigm examples as much as they resemble each other. The paradigm examples of 'non-persons' are those ordinary things that we unhesitatingly and naturally say are not persons—for example, houses or trees or tables. With two exceptions, we retain all the syntactic rules linking 'person' with other expressions; as before, a 'person' is (of logical necessity) a mental substance who is capable of having mental events of some sophistication. So a 'person' who 'knows' *p*, 'believes' *p*; and a person who 'has the thought that *p*', 'is conscious that he has the thought that *p*', and so on. The first exception is as follows. We abandon any syntactic rules that allow us to deduce from 'S is a person' propositions of the form 'S could have less power or knowledge than he has'. The second exception is that we abandon any syntactic rules that allow us to infer from 'S is a person' propositions of the form 'there could be a different person instead of S who has all the same properties as S'. Then, in the new wide analogical sense of 'person', it will be a contingent truth about certain kinds of 'person' that they could exist with less power or knowledge than they have at some time and that they have thisness. In this analogical sense, the theist would normally claim, God is a person.

Similarly, in order to make sense of how God could be a 'form'—that is, in more modern terms a conjunction of essential properties or an 'essence'—we need to modify the semantic and syntactic rules for the use of 'form'. In the normal understanding of a form and of a 'law of nature' on the RBU account, whether or not forms or laws exist independently of

the substances that have them or are governed by them, it is individual substances (or, on other modern views, events) that cause effects. The forms of substances, or laws of nature, merely determine which events substances cause. The essence of an electron, which includes its causal powers, does not cause it to annihilate a positron; it merely determines that the electron (a substance) will annihilate a positron with which it collides. And the law of gravity does not cause material bodies to exist; it merely determines what effects already existing substances will have on other substances. So, if we are to think of God as a 'form' who causes the existence of substances, we must give that word an analogical sense. This again involves retaining the same paradigm examples of 'forms' (that is, properties), but insisting that, in order to be a 'form', some being needs only to resemble the paradigm examples more than it resembles objects that are clear cases of 'non-forms', but does not need to resemble the paradigm examples as much as they resemble each other. The paradigm examples of 'non-forms' are those ordinary things that we unhesitatingly and naturally say are substances, not properties—for example, houses or trees or tables. It also involves abandoning any syntactic rules that allow us to infer from 'S is a form' that 'S exists or causes effects iff it is instantiated in some substance' or that 'S is immutable or timeless'. But we retain such rules as that 'S is a form' entails 'S does not have thisness' and, 'if S exists at one time, S exists at all times'.

Since we are merely giving senses to 'person' and 'form' wider than their mundane senses, if it is logically possible that there is a person in the mundane sense (as obviously it is), it is also logically possible that there is a 'person' in the new wider analogical sense, and similarly for a 'form'. What is disputable is whether it is logically possible that there is a 'person' in this new sense who is also a 'form'—that is, constituted by the essential properties of a deity, and lacking thisness. I do not believe that anyone can show, by any a priori direct or semi-direct method, that there is any contradiction entailed by this supposition. But I also suspect that any attempt to spell out what it would be like for there to be such a person is not going to convince most of those who doubt the logical possibility of this. So, to support the claim of logical possibility, we would need to proceed in the way described in Chapter 4—that is, to show that the most probable explanation of various phenomena (and one somewhat more probable than not) is—if that hypothesis is logically possible—the hypothesis that there exists a 'person' of that kind. And

that is just what I have argued elsewhere, mainly in *The Existence of God*, the second volume of this trilogy.[5] I argued that evidence of the existence of a physical universe, in which everything behaves in conformity with laws that lead to the evolution of conscious human beings, together with various other very general evident phenomena, would be explained very well by the existence of an essentially everlasting and omnipotent person (of the kind analysed above), if it is logically possible that there be such a person. It would be explained very well, and so is very probably true, because that hypothesis is a very simple hypothesis that makes it probable that the evidence just described would occur. If we supposed that the person whose existence explained this evidence was only contingently everlasting and omnipotent, it would leave it as a complicated feature of the hypothesis of theism that the same person existed and remained omnipotent throughout all known historical time, and so we would rightly look for some superior explanation of that feature. And, if we supposed that the explanation was that that person began to exist at some long distant time with the essential properties of a deity and also forward everlastingness, that would leave it as a complicated feature of that hypothesis why he began to exist at that distant time, and so again we would rightly look for some superior explanation of that feature. To suppose that that person is essentially backwardly as well as forwardly everlasting would remove that complexity.

Unless the omnipotent person is essentially everlasting, he would be able to make the universe no longer depend on him for its continuing existence (unless it would be a non-best act to do so—which is far from obvious). Only if this is not possible, would it follow that, as theism has traditionally maintained,[6] the universe (in the narrow or wide sense) is such that it

[5] While *The Existence of God* (2nd edn, Oxford University Press, 2004) sought to show how all the traditional essential divine properties follow from essential eternal omnipotence, omniscience, and perfect freedom, I argue in the present book that, on a reasonable construal of omnipotence, omniscience, and perfect freedom, both the latterx follow from omnipotence alone. I did not discuss in *The Existence of God* whether God has 'thisness'. However, I did discuss this in a later article ('God as the Simplest Explanation of the Universe', in A. O'Hear (ed.), *Philosophy and Religion* (Cambridge University Press, 2011)), which corrects *The Existence of God* in certain respects; and I argued there for the greater simplicity of a hypothesis that postulates a God who does not have thisness.

[6] 'God cannot make a thing to be preserved in being without himself' (Aquinas, *Summa contra Gentiles*, 2.25.19).

does not have the causal power to exist without God's sustaining action, and God could not give it that power.

And, I now add, it would be very much simpler, and so add greatly to the probability of the hypothesis of theism, to suppose that God is a person of a kind who does not have thisness, but whose identity is constituted solely by his properties. For his thisness would be an extra feature (not in the technical sense, a 'property') that makes him who is. And, if God had thisness, then things would have been different if a different essentially everlasting omnipotent being had been in charge of the universe rather than the actual God who is in charge. But, in that case, just as it is logically possible that, instead of me existing, there could have existed any one of an infinite number of possible human persons having exactly the same properties throughout their life, it would be logically possible that, instead of the actual God, there could have existed any one of an infinite number of possible deities having exactly the same essential properties throughout endless time. And so it would be immensely improbable a priori, and so also on any a posteriori evidence, that our God would be charge of the universe rather than any of the equally probable (that is, equally improbable) logically possible different essentially everlasting and omnipotent deities. To suppose that God does not have thisness has the consequence that any deity who has the same essential properties (both those analysed so far, and any other essential properties he might have) as the actual God would be the actual God.

Many other individual logically contingent things lack thisness and are the things they are solely in virtue of essential properties. These properties include both the essential properties of the kind of thing to which the individual belongs, and also—in the case of things of kinds of which there can be more than one individual existing at the same time—essential properties that make the individual that individual member of the kind. Indeed, the normal view of physics is that all fundamental particles lack thisness.[7] For example, an electron is the electron that it is in virtue of

[7] For discussion of what it would be for fundamental particles not to have thisness, see *Mind, Brain, and Free Will*, 32–8; and for discussion of how one might determine whether or not they do, see my 'Thisness', *Australasian Journal of Philosophy*, 73 (1995), 389–400. For a thorough historical account of the development of views on this topic, and a more sophisticated treatment of what conclusions can be drawn about it from the present state of quantum theory, see S. French and D. Krause, *Identity in Physics* (Oxford University Press, 2006).

having the essential properties of an electron (a certain mass, charge, and spin), and certain properties that make it the particular electron it is (its spatial position; and its spatio-temporal history—that is, its spatio-temporal continuity with electrons occupying certain spatial locations in the past). So the world could not be different in the respect that there existed a different electron instead of the actual electron that occupied a certain location and had the same spatio-temporal history. And, of course, as we saw in Chapter 7, many philosophers hold—in my view mistakenly—that human persons do not have thisness, and that a person is who she is in virtue of her properties (for example, having continuity of physical and mental properties with some particular past person having certain properties). So it is not a totally incomprehensible supposition to suppose that there could be a kind of 'person' who did not have thisness.

Arguments of this inductive kind for the logical possibility of a hypothesis do, however, have to be weighed against any direct or semi-direct arguments for its logical impossibility. As I have emphasized throughout this book, within the broad framework of the Judaeo-Christian–Islamic tradition there can be different understandings of what it is for there to be a God, varying with which of the properties discussed in this book we suppose God to have and to have essentially, and how they are to be analysed. And ultimately we must choose that understanding that provides the most probable explanation of the phenomena—so long as the arguments to show that it is not logically possible that there be a being of that kind are not very strong. For example, I argued in Chapter 12 that it was clearly inconceivable that there could be a timeless being who had many of the other traditional properties ascribed to God, and so—I claim—even if a theistic hypothesis were simpler in postulating a timeless rather than an everlasting God, the strong apparent inconceivability of the claim that God is timeless rules it out.

I shall assume for the rest of this book that the arguments from phenomena to the existence of a being who is essentially eternal and omnipotent (in my preferred senses) but lacks thisness are sufficiently strong to outweigh any direct or semi-direct arguments against the logical possibility that there is such a being. That being—for reasons given above—could be a 'person' only in an analogical sense. He would be personal in having beliefs, intentions, and such like, but not personal in being who he is independently of the kind of beliefs, intentions, and so on he has. I shall call a being who is essentially everlasting and

omnipotent and also lacks thisness a 'divine' being.[8] But, as with the examples of the community of blind people and of the nature of light considered in Chapter 4, while inductive arguments make it probable that the existence of a divine being is logically possible and so conceivable (by some being), they do not enable us to conceive it. We are still unable to make sense of what it would be like to be such a being, although we have reason to suppose that there can be and indeed is such a being.

Could There Be more than One Divine Being?

Duns Scotus has an argument against the possibility of there being more than one (essentially) omnipotent being: 'if two omnipotent beings exist, each will make the other impotent, not indeed by destroying the other, but because one by his positive will could keep non-existent what the other wills should exist'.[9] To put the point in my terminology, one such being might try to do one equal best action while the other might seek to do a different equal best action, the success of which would be incompatible with the success of the action of the first being. A might, for example, try to create a star of one kind at a certain place while B tried to create a star of a different kind at that same place. Scotus adds at this point that an objector might suggest 'sophistically' that these beings might 'voluntarily agree on a common way of acting through some sort of pact', but claims that the result of the pact would be to leave neither of them omnipotent. But he does not see the point that to break a pact would be a bad (indeed, wrong) act; and that for quite other reasons God's omnipotence must be construed in such a way as to rule out the possibility of his doing what is bad. So, once the pact has been made, both beings could be omnipotent, because they could do anything within the limits of the pact, and would not be able to do anything outside those limits, since that would be a bad act (and so not within the scope of a person with omnipotence in sense [ϵ]). However, there are innumerable different equal best ways in which such a pact might be made, and each of the supposedly omnipotent beings might propose different ways and

[8] As I expressed it in *The Christian God* (Oxford University Press,1994), 150–8, such a being is 'pure limitless intentional power'.

[9] See Scotus, *Ordinatio*, 1. d2.q3; trans. A. Wolter, *Duns Scotus: Philosophical Writings* (Hackett Publishing Co., 1987), 90.

then defer to the other being's proposal at the same time as the other deferred to its proposal. So it would be in no way necessary that the supposedly omnipotent beings would reach immediate agreement on the nature of the pact (that is, on the limits within which each would agree to restrict his activity); and so it would be possible that there would be an initial period during which there was no pact, during which the supposedly omnipotent beings would be unable to exercise all their powers and so would not be omnipotent. It would seem to follow that there could not be two essentially omnipotent beings.

But that follows only if each of the beings does not have throughout all time a sphere of influence where the other being would correctly believe it wrong to act. Scotus's argument has the consequence that the different spheres of influence cannot be settled by mutual agreement (because there would always be a time before the agreement was reached), but would have to arise from some further property apart from divinity, everlastingly possessed by one divine being and not the other. I suggest that the simplest way in which this could come about is if the divine beings are not independent beings, but one divine being A causes the existence of another divine being B at each immediately subsequent period of everlasting time by an act at an earlier period. In order for B to be divine, A would have to cause B's existence in virtue of it being a uniquely best act to do so, and not a freely chosen act. In virtue of being dependent on A for his existence at each period of time, B will accept the obligation to conform his activity to whatever sphere of influence A allocates him; and, in virtue of B's acceptance of the limits to his sphere of influence, A would recognize it as a best action not to interfere in that sphere. Since divine beings do not have thisness, to be different from each other they must have different essential properties; and they would have different properties in virtue of their different relations to each other. A would be individuated as the divine being on whom all else depended, and B would be individuated as the divine being (causally) dependent on A. It seems unnecessary to suppose that they would differ from each other in any other essential way. Then there could be a third divine being C everlastingly caused to exist by the joint action of A and B; and the simplest property by which he could be individuated is the property of being dependent on A and B jointly or on A through B.

God is normally supposed essentially not to be dependent on any other being for his existence. It might be thought that it follows from

God's omnipotence that he could eliminate any other being if he so chose, and so could not depend on any other being for his existence. This does not follow, however, because it might be a bad act to eliminate some other such being, and so not an act that a being omnipotent in sense [ϵ] (who could do no bad act) could do. But, taking seriously the analogy of God not merely to *a* supreme form or fundamental law of nature, but to *the* supreme form on which all other forms depend or the fundamental law that entails all other laws, entails that there could not be any being that was not dependent on him for its existence. I shall say that a divine being who is essentially not dependent on any other being for his existence is an independent divine being. It follows from the argument given that the whole community of (two or more) divine beings, or—if there is only one divine being—that unique divine being, would be an independent substance, but any other divine beings would not be independent divine beings.[10] Henceforward I will assume that there is only one divine being, and so that that being is an independent divine being. But my subsequent discussion can, I suggest, easily be rephrased to take account of the possible existence of more than one divine being. An independent divine being will, if he ever exists, always exist in virtue of his nature; and a dependent divine being will, if ever he exists, necessarily always exist in virtue of an independent divine being keeping him in existence, because that is necessarily always the best act for the latter to do.

The Simplicity of God in Western Medieval Thought

I believe that in essence my account of the nature of God up to this point is the same as that of much of the Western patristic and medieval tradition from Augustine onwards, and in particular that of Aquinas, and so also of much modern Catholic theology—with the important exceptions of how God's 'omniscience' and 'eternity' are to be understood. These writers do, however, often express their views in ways that seem (especially in modern English translations) very paradoxical. All theologians hold that there is a natural unity to the divine essence, and so

[10] See Additional Note C.

that he is a very simple being, a claim that I certainly endorse. But, beginning with Irenaeus, and becoming more explicit in Augustine and finally in Anselm, Western theologians make the paradoxical claim that God's simplicity involves all the essential divine properties being the same as each other and the same as God himself. Thus Anselm, addressing God, wrote: 'Life, wisdom and the rest are not parts of thee, but all are one; but each of these is the whole, which thou art, and all the rest are.'[11] But how can those properties be the same as each other? How can perfect goodness be the same property as omniscience? And how can God, who is a substance, an entity who possesses properties, be the same as those properties?

Aquinas expresses this claim in a slightly different and less paradoxical way from Anselm. The claim, as he expresses it, is not that the essential divine properties are the same as each other and as God, but that the instances of those properties in God are the same as each other and as God—for example, God's omnipotence, not omnipotence as such, is the same as God's omniscience, and this is the same as God.[12] The claim that the property instances are the same as each other can then be understood in a non-paradoxical way as the claim that, for each of God's essential properties P, Q, and so on, of logical necessity 'God is P' iff 'God is Q'; and so, for example, necessarily 'God is perfectly good' iff 'God is omniscient'. Given that, to be the person who is God, an individual has to have certain essential properties, such as the ones I have been discussing, it follows that, if God has one of these properties, and so God exists, he will have all of them. The claim of the identity of the property instances in God is then just the claim that all the traditional divine properties are essential properties of God.

I quoted above Anselm's claim that God is his essential properties rather than a substance in which properties are instantiated; and Aquinas also claimed that God is to be identified with 'his own essence or nature'.[13] Such an essence would be a form. This involves thinking of this particular essence (the conjunction of all the essential properties of God), unlike other essences, as being the same as the substance that

[11] *Proslogion*, 18.

[12] For an assembly of relevant quotations from Aquinas, see William E. Mann, 'Divine Simplicity', *Religious Studies*, 18 (1982), 451–71; see pp. 454–5.

[13] *Summa Theologiae*, Ia.14.9 ad.2.

instantiates it; and I suggested earlier in this chapter why it might be probable that there is such a being. But sometimes Aquinas writes paradoxically that the essence of God '*[est] ipsum esse*', which gets translated as 'is to exist', which seems to be making the paradoxical claim that God's essence is to exist. But being some substance or form cannot just consist in existing; a substance or form is minimally a thing of some kind (a person, or a material object, or even a divine person) and the proposition that that substance (or form) exists entails that a thing of that kind exists. However, to quote Kretzmann, 'the identification Aquinas seems to prefer is this: God, or God's nature, is 'his own being, *suum esse*',[14] which Kretzmann understands as saying that God is 'the uniquely necessary being of the kind that ultimately explains all existing'. That, as well as being a 'person' in an analogical sense, God is in an analogical sense a supreme 'form' that 'ultimately explains all existing' was a central claim of mine earlier in this chapter.

[14] Norman Kretzmann, *The Metaphysics of Theism* (Oxford University Press, 1997), 127. In that book Kretzmann is commenting on Aquinas's *Summa contra Gentiles*. For a place in *Summa Theologiae* where God is said to be *suum esse*, see Ia.3.4. In *Summa Theologiae*, Ia.7.1, Aquinas writes that God is *suum esse subsistens*, 'his own being subsisting' (translated in the Blackfrairs edition as 'existence itself subsisting'—an incorrect translation, if Kretzmann is right about the meaning of *suum esse*.)

14

A Necessary Being

When theists have thought about the issue, they have always wanted to claim that it is not a lucky accident that there is (eternally—that is, on my account everlastingly) '*a* God'—that is, that there is a divine being. (The reader will recall that I am assuming for the rest of this book that there is only one divine being.) Theists have wanted it to be not merely a fortunate chance that the actual God exists. This claim has often been expressed as the claim that 'God', used as the proper name of that supposed actual being, is a 'necessary being'. But in what sense of 'necessary' is it logically possible that a person of the kind analysed in the previous chapters could be a necessary being? I shall consider two accounts of God's necessary existence, which philosophers have considered. The weak account understands God being a necessary being as him being uncaused; the strong account understands God being a necessary being as him being a metaphysically necessary being. I shall argue that both accounts are unsatisfactory, and that—given that there is a divine being—there is quite probably a correct intermediate account of his necessity, but one beyond the power of humans to understand.

The Weak Account

Aquinas held that God is a 'necessary being'; but all that he meant by a 'necessary being' is a being not subject to corruption—that is—one whose nature is such that it will go on existing for ever unless something else annihilates it. So he held that angels and human souls are necessary beings,[1] but only conditionally necessary. One way in which he distinguished God from other necessary beings is as one 'who does not have a

[1] For angels, see the implication of *Summa Theologiae*, Ia,50.5.ad.3. For human souls, see the implication of *Summa Theologiae*, Ia.75.6.ad.2.

cause of his necessity from somewhere else';[2] and, taken by itself that leads to the weak account of divine necessity: God is 'necessary' because he is not causally contingent on anything else. I myself advocated this view in the earlier editions of this book.[3] God being essentially everlasting can explain why, if ever there is ever a God, there is always a God, and on the timeless view of God—if it were coherent—his being essentially timeless could explain why, if there is a God, he exists timelessly. Both views can explain why, if there is a God, there is eternally a God. But it remains logically contingent and an ultimate brute fact that there is ever a God; and that might seem to be a problem for theism, because it suggests that God too is at the mercy of a force stronger than he is—that is, the force of pure chance—and so it well might seem to be a lucky accident that there is a God.

The Strong Account

The strong account holds that God is a metaphysically (and so logically) necessary being, which it understands as the claim that it is metaphysically necessary that there exists a divine being. On the assumption that there can be only one such being, and we use 'God' as the proper name of that unique being, it follows from the strong account that (since the words that I have used to define 'divine properties' are informative designators) it is metaphysically necessary that God exists. Someone may hold that view without purporting to be able to *prove* that it is metaphysically necessary that God exists. To attempt to prove this is to attempt to give an ontological argument for the existence of God. An ontological argument is, on Kant's definition, an argument 'a priori, from mere concepts'.[4] It is an argument that has as one premiss a definition of God (by which I mean a proposition stating that the possession of some property or properties by some being is logically necessary and sufficient

[2] *Summa Theologiae*, Ia.2.3.

[3] See, e.g., *The Coherence of Theism* (Oxford University Press, 1977), 277: 'To say that God is necessary . . . is to say that God does not depend for his existence on himself or on anything else.' For this view in Islamic thought, see Avicenna: 'When it is stated that [God] is a necessary being, this means that he is a being without a cause, and that he is the cause of other than himself' (Avicenna, in his *a-Risālāt al-'Arshīya*, a passage trans. by A. J. Arberry in *Avicenna on Theology* (John Murray, 1951), 32).

[4] I. Kant, *Critique of Pure Reason*, B619, trans. N. Kemp Smith (Macmillan, 1964).

for that being being God), and has other purportedly logically necessary premisses that together entail that there exists a being who does have those properties, and so entail that God, thus defined, exists. If the argument is sound (that is, if the other premisses are true and together with the definition entail the conclusion), then not merely is it metaphysically necessary that God (in the sense of a unique being who has the defining properties) exist, but it is logically necessary that God exists. For any proposition entailed by a conjunction of logically necessary propositions must be logically necessary. There are various ontological arguments, differing in how they define God, which other purportedly logically necessary premisses they employ, and by which steps they move from their premisses to the conclusion.

In the eleventh century Anselm produced the first 'ontological argument'. He defined God as 'that than which nothing greater can be conceived' and (on the assumption that there could be only one such being) claimed (as in modern terms, a logically necessary truth) that a being that 'exists in the understanding alone'—that is, does not really exist—would not be as great as one that does really exist, and so would not be one 'than which nothing greater can be conceived'—since we can conceive of that being really existing.[5] So, he claimed, there is a contradiction involved in maintaining that 'that than which nothing greater can be conceived' does not really exist. Hence, he concluded, 'God exists' is logically necessary. Since Anselm, many different ontological arguments have been produced, and there has been enormous philosophical controversy about whether any of these arguments is sound, and if not, why not.[6] The vast majority of philosophers have held that no such argument is sound. But, if there is a sound ontological argument, then 'God exists' would be logically and so metaphysically necessary; and the strong account of the divine necessity would be, not merely logically possible, but true.

I know of no evidence that anyone before Anselm either advocated or rejected a strong account of divine necessity. Subsequently to Anselm, very many thinkers have attempted to produce a sound ontological argument. But there have been other thinkers who have claimed that God may be a logically necessary being, even if we pick him out in some way other

[5] See Anselm, *Proslogion*, 2. The version of the argument in Proslogion 3 is a somewhat more sophisticated version of the same argument.

[6] See Additional Note D.

than by necessary and sufficient conditions. We might, for example, pick him out as 'the creator of the universe', an expression that—if God exists—uniquely picks him out. But, given the normal theistic view that I have been seeking to elucidate for the past many chapters, there is much more to being the being who is God than that. On the account that I have developed so far, to be God, a being has to be essentially everlasting and omnipotent and to lack thisness—that is, to be 'divine' as I have defined this term. But, while being divine may be necessary for being that being, it may still not be sufficient. Plausibly we do not know the full set of necessary and sufficient properties for being the being whom we pick out as 'the creator of the universe' or by any other of his properties that uniquely identify him. So, others have postulated, this full set of necessary and sufficient properties, this essence, is such that it is logically necessary that a being who has all these properties exists. But, in ignorance of what is the essence of God, we cannot prove deductively that his essence has this feature. Just as—see Chapter 3—unless we know the essence of the mountain picked out by 'Everest', we could not know the metaphysically necessary truth that 'Everest is Gaurisanker', so, unless we know the essence of the being picked out as 'God', we could not know the metaphysically necessary truth that 'God exists'. But, the argument goes, it could still be metaphysically necessary that there is a divine being who has such an essence—although we may pick out that being simply as the divine being or by some contingent property, and call him 'God'. Even if no one were able to prove that there could be an essence such that it is logically necessary that there is a divine being who has that essence, maybe there could be good grounds for believing it. For example, maybe an inductive argument of the kind I discussed in the previous chapter could be adduced in favour of it. Those who have thought along these lines hold, like Anselm, that God is a metaphysically necessary being, but, in ignorance of what is the essence of God, they hold that there could not be a sound ontological argument for his existence.

One such thinker was Duns Scotus. He held that we have only a 'confused' concept of God. The only concepts that we can have are derived from creatures—that is, they are such concepts as 'wise' or 'powerful', which we understand because we have seen instances of them in the created world. Because, he claims, we do not have an adequate concept of God (that is, a concept the possession of which involves knowing necessary and sufficient conditions for being God), we cannot know that—in my

terminology—it is metaphysically necessary that God exists—that is, that God has an essence such that it is logically necessary that there exists a being with that essence. But, if we knew what we are talking about when we are talking about God, Scotus claimed, we would know this.[7] Scotus claimed to have other, a posteriori if not a priori, reasons for believing that there is a being who had such an essence.[8]

Leibniz produced more than one ontological argument; and he also, like Scotus, claimed also to have a posteriori reason to believe that there is a 'metaphysically necessary' being in my sense of that term. He argued that, to explain the existence over time of the universe, we must postulate God as 'something which is of absolute or metaphysical necessity'—that is, 'one in which the contrary implies a contradiction'.[9] And, since Leibniz, most philosophers have assumed that theism involves the view that God is a metaphysically necessary being. Kant cited Leibniz's discussion and made this assumption. He went on to argue that 'we are unable to conceive what can be meant by [the] necessity [of such a being]. The concept of necessity is only to be found in our reason, as a formal condition of thought; it does not allow of being hypostatized as a material condition of existence'.[10]

I now argue that it is not logically possible that it is metaphysically necessary—either logically necessary or a posteriori metaphysically necessary—for any substance (that is, a thing capable of causing or being caused) that that substance exists, and so (since God is a substance on my definition of 'substance') that it is not logically possible that it is metaphysically necessary that God exists. In Chapters 1 and 2 I introduced the concept of a 'proposition' as what is expressed by a sentence, and I defined the modal status (possible, necessary, or whatever) of a proposition as the modal status of any sentence that expresses it. So I was assuming that modal properties are primarily properties of sentences, and only

[7] 'The proposition ['God exists'] is known through itself [*per se nota*] to an intellect which has a distinct understanding of the terms, in just the same way as "every whole is greater than its part" is known' (*Reportatio*, 1 d3 q2, n63). I am most grateful to Richard Cross for guiding me through the texts of Scotus relevant to this issue. For full analysis of Scotus's view on this topic, see Richard Cross, 'Duns Scotus and Divine Necessity', *Oxford Studies in Medieval Philosophy*, forthcoming.

[8] See Additional Note E.

[9] 'On the Ultimate Origin of Things', in *Leibniz: Philosophical Writings*, trans. Mary Morris (Everyman, 1934), 32–3.

[10] Kant, *Critique of Pure Reason*, B620.

derivatively of the propositions that they express. A sentence is logically necessary iff its negation entails a contradiction. The negation of an existential sentence has the form 'there is no *x* such that *x* is G'; it claims that a certain property (or conjunction of properties) **G** is not instantiated. Hume made the very plausible claim that the mere non-existence of any 'being' (which clearly includes any 'substance') of some kind cannot entail a contradiction.[11] It follows that no positive existential sentence can be logically necessary and so no such sentence can express a logically necessary proposition. So Hume's claim must hold also, as he concluded, for the special case where 'G' designates any conjunction of properties of a kind supposed to constitute the essence of God. But, if it is not logically necessary that there be any substance having a certain conjunction of properties, it cannot be logically necessary that there be a particular substance having that conjunction of properties. So God cannot be a logically necessary being.

Anyone who claims that 'there is no *x* such that *x* is G' (where 'G' designates any conjunction of properties of the kind traditionally ascribed to God) entails a contradiction will need to hold that innumerable other sentences of very different kinds to each other entail contradictions, when the rest of us hold that they are obviously logically possible. For example, they will need to hold that 'Once upon a time there were no rational beings' and 'No one knows everything about the past' and 'No one is perfectly good', and—among sentences evidently describing non-actual worlds—'The only substances are four mutually repelling steel balls' and 'No one knows what is happening except within a sphere of 1 mile diameter surrounding their body' all entail contradictions, because—if any one of them does not entail a contradiction—there would not be a God in anything like a traditional sense. For example, if 'no one knows everything about the past' does not entail a contradiction and so is logically possible, then 'there is an omniscient person' ('omniscient' being understood in at least the weak sense) could not be logically necessary, and—if it were logically necessary that there is a God—he could not be omniscient. Someone could show that all such sentences entail a contradiction only if they understood an enormous number of predicates—not just one or two technical philosophical terms—in

[11] 'There is no being . . . whose non-existence implies a contradiction' (D. Hume, *Dialogues Concerning Natural Religion*, pt 9).

different senses from the rest of us, or if they understood one or more formal terms such as 'exists', 'not', or 'all' differently from the rest of us. In view of the similarity in respect of the cognitive mechanisms and the process of language acquisition between humans who believe that God is a logically necessary being and those who do not, I do not find it plausible to suppose that the former understand all these predicates in different senses from the rest of us. But, if they do understand the predicates in the same senses as the rest of us, they will have to admit that 'God does not exist' does not entail a contradiction, and so 'God exists' cannot be logically necessary in anything like the sense in which I have spelled it out.

But what of the possibility that 'God exists' is metaphysically necessary, although not logically necessary, because we do not fully understand to what we are referring by 'God'? If so, suppose we replace 'G' by 'G*', which is some uninformative designator of God in terms of some logically contingent properties that many people believe to be possessed by a unique individual whom they worship—for example, 'the deity who revealed himself to Abraham', or 'the deity who became incarnate in Jesus Christ'. In that case, 'there is an x such that x is G*' would not be logically necessary—it is not logically necessary that any deity revealed himself to Abraham or became incarnate in Jesus Christ. But 'there is an x such that x is G*' could still be metaphysically necessary if 'G' is an informative designator of God's unknown essence without that entailing that any of the sentences discussed in the previous paragraph is logically impossible. But this does involve supposing that we could believe that God exists without believing that he has any of the properties traditionally ascribed to him. In that case, although the sentences discussed in the previous paragraph might still be false, they would not be logically impossible.

If we suppose that we know nothing at all about what are the essential properties of God, the earlier Humean intuition that no positive existential sentence can be logically necessary might still seem plausible, but, in the absence of the arguments of the paragraph before last, it might not seem nearly as plausible as before. Yet, to suppose that we know nothing at all about what are the essential properties of God would involve abandoning the understanding of God as essentially omnipotent, perfectly good, and so on. Theists would have to suppose that the God whom they worship could suddenly become bad or too deaf to hear prayers. That would involve abandoning totally the traditional concept

of God; and it is for the existence of a God of that kind that I argue (in *The Existence of God*) there are cogent arguments. It would also, I shall be claiming in Chapter 15, largely deprive us of any grounds for worshipping him. Yet, if we suppose that God has most of these traditional essential properties, and so that predicates that designate them are entailed by 'G', then it would follow that most such sentences as 'Once upon a time there were no rational beings' and 'No one knows everything about the past' would be logically impossible, and the difficulty that fairly obviously they are not logically impossible remains. No doubt we do not know all the essential properties of God, but to suppose that most of the properties traditionally believed to be essential to God are not essential means that it is not very plausible to suppose that 'God exists', where 'God' is understood in anything like a traditional sense, expresses a metaphysically necessary proposition, and so that God is a metaphysically necessary being.

Everything that I have written so far in this book assumes that the primary bearers of modal properties are sentences; and so that talk about the modal properties of propositions is analysable as talk about the modal properties of sentences that express these propositions. But, as I commented in Chapter 8, some philosophers hold that the primary bearers of modal properties are propositions that exist eternally in a timeless realm; and that talk about the modal properties of sentences is to be analysed as talk about the modal properties of those propositions that the sentences express. They claim that there are innumerable propositions in this timeless realm having some truth value and modal status, most of which will never be expressed by any human. We can see this, they claim, by the fact that the propositions that we do express would have the truth value and modal status they have, whether or not anyone had ever expressed them. The proposition expressed by the sentence 'It snowed on the Rocky mountains on 1 January 1 CE' could still be true, even if no one had ever expressed it or would ever express it.

I do not see any good reason for believing that propositions exist in a timeless realm, and hold that talk about propositions is merely a useful fiction and can always be rephrased in a logically equivalent way in terms of talk about sentences (either actual sentences or sentences constructible in some logically possible language) that do not entail the timeless existence of unexpressed or unexpressible propositions. The sentence 'the proposition expressed by the sentence "It snowed on the Rocky

mountains on 1 January 1 CE"' is logically equivalent to the proposition expressed by the sentence 'if anyone who speaks English were to utter the sentence "It snowed on the Rocky mountains on 1 January 1 CE" or any sentence that means the same as that sentence, he would utter a true sentence'. And the proposition expressed by the sentence 'there is a true proposition that no one will ever express' is logically equivalent to the sentence expressed by 'it is logically possible that there is a language in which a true sentence can be constructed that is such that neither it nor any sentence that means the same as it will ever be expressed in any language'. We cannot interact with propositions, nor do we need to postulate them in order to explain what we observe—the behaviour of humans who utter sentences. And, if the necessary truths were true eternal propositions, there would be no easy explanation of how we are in a position to know which such propositions are necessarily true. Why should we trust our intuitions about this timeless realm?[12] Whereas, if necessary truths are truths about human language, there is a ready explanation of how we are in a position to know about their modal status; we learn under which (if any) conditions they would be true merely by learning language.

If, however, we do suppose that propositions are real timeless entities that have a modal status independently of any human sentences that express them, then there would be good reason to believe that there exist innumerable propositions, never expressed and maybe never expressible. In that case, Hume's intuition that, for any kind of substance, it is always metaphysically possible that that substance does not exist would not be relevant—for such propositions would not be substances. If propositions are real timeless entities, it is not plausible to suppose that it is a mere metaphysically contingent truth that they exist. The most plausible supposition would be that it is metaphysically necessary that propositions exist. And it would therefore begin to be plausible to suppose that entities of other kinds, and in particular substances, could exist necessarily, and so to suppose that the proposition expressed by the sentence 'God exists' might be a metaphysically necessary truth, and so that God might be a metaphysically necessary being. This might begin to be plausible, even if we assume that logically impossible propositions are ones that entail a contradiction, and metaphysically impossible propositions

[12] For these objections to the necessity of propositions of mathematics, see P. Benacerraf, 'Mathematical Truth', originally published in *Journal of Philosophy*, 70 (1973), 661–79.

are ones from which we can derive logically impossible propositions by substituting co-referring informative designators for uninformative designators. For, if propositions are timeless entities existing independently of humans or anything else logically contingent, we might not have any comprehension of the depths hidden within propositions. So the proposition expressed by 'there is a God' might be logically necessary, because then its negation might entail innumerable propositions that never will be and perhaps never could be expressed by humans and that would in turn entail a contradiction.

There would, however, still remain the difficulty of the innumerable other apparently logically possible propositions that would have to be held necessary. And there would also be an unwelcome consequence for theism. For there are innumerable metaphysically necessary propositions, other than (if it is one) 'God exists'; and, if these are actually existing timeless entities, it looks as if they constrain how God can act. If, for example, it is a necessarily true proposition that God cannot make me exist and not exist at the same time, then this constrains what God can do—not merely what we can do with the English language without uttering a necessarily false sentence. That necessarily true proposition would limit God. One way of attempting to avoid this is to claim that necessarily these necessarily true propositions are ideas in the mind of God, and so part of his essence. But that raises the question why these propositions rather than any other ones, for example the one expressed by 'God can make me exist and not exist at the same time', are part of God's essence, and, if the answer is that it is just a brute fact that they are, that would make God essentially a very un-simple being. Alternatively, one could suppose that God has an essence such that necessarily he causes the existence of just these necessary truths.[13] But it appears to make no sense to suppose that it requires a causal act of some agent, even a timeless God necessarily having to act in this way, to make it the case that the very simple tautologies such as 'all bachelors are unmarried' or '2 + 1 = 3' are necessarily true. These propositions seem logically necessary, whatever any agent does. It is sometimes urged that some necessary propositions depend on other necessary propositions fortheir necessity—for example, '2 + 1 = 3' would not be necessary unless '1 + 1 = 2'; and so it is

[13] See, e.g., Thomas Morris and Christopher Menzel, 'Absolute Creation', in T. Morris (ed.), *Anselmian Explorations* (University of Notre Dame Press, 1987), 161–72.

plausible to suppose that all necessary propositions depend for their necessity on one necessary proposition, that 'there is a God'. But then the whole set and so each member of the set would be necessary, whatever action any agent such as God might do. Yet it seems to make even less sense to suppose that 'all bachelors are unmarried' would not be true unless some agent had acted so as to make true all the other members of the set of necessary truths (including some highly complicated mathematical truths) to which it belongs.[14]

If, however, we are forced to suppose that God is essentially a very un-simple being, that would be a very unwelcome result for theism, because it would deprive us of any good probabilistic arguments from observable phenomena for his existence—which in my view are by far the most cogent arguments for his existence. For such arguments claim that God provides the most probable explanation of some phenomena (for example, the most general features of the universe, such as its conformity to laws of nature that lead to the evolution of humans). Yet there are always innumerable possible complicated hypotheses that could be constructed that would lead us to expect the most general features of the universe—for example, polytheism, or a hypothesis that postulates that each fundamental particle behaves in the same lawlike way without there being any simple cause of this. But it is always the simplest hypothesis that leads us to expect some phenomenon that is the one that is most probably true. So, if God has to be a very un-simple being if he is to be a metaphysically necessary being, and I am right in supposing that by far the most cogent arguments for his existence must claim that he is a very simple being, we would have far less reason to believe that there is such a God than we would have otherwise.[15] So, for all these reasons, I reject the strong account of divine necessity.

An Intermediate Account

I now argue that it is plausible to suppose that, if a divine being exists, there is a true account of the necessity of that being, stronger than the

[14] See Additional Note F.

[15] For a brief summary of the criteria for judging an explanatory theory that purports to explain certain data to be probably true, see Chapter 2. For my full account of inductive arguments for the existence of God, and why their cogency depends on the assumption that God is a very simple being, see my *The Existence of God* (2nd edn, Oxford University Press, 2004).

weak account but weaker than the strong account.[16] Aquinas claimed, not merely, as I quoted earlier, that God 'does not have the cause of his necessity from somewhere else', but that he is *necessarium per se*—that is, that he derives his necessity from himself. God has aseity.[17] I develop this suggestion in a way that Aquinas might or might not have welcomed into what I call the intermediate account of God's necessity.

The principle of sufficient reason (PSR) is an initially plausible principle. As Leibniz put it: 'no fact can be real or existing and no proposition can be true unless there is a sufficient reason why it should be thus and not otherwise, even though in most cases these reasons cannot be known to us.'[18] This principle is, however, less than compelling. Not merely is it not obviously logically necessary, but there may well be actual exceptions to it. It does not seem obviously false that sometimes intentional agents exercise free will, choosing between alternatives without their choices being caused; and that sometimes the behaviour of fundamental particles, as the normal interpretation of Quantum Theory claims, is not fully determined by their causes. But note that—even granted that in such cases there is no full determination of events—the cited events have causes, just not fully determining causes. An intentional agent causes one alternative effect (among a number of alternatives available to her), and a fundamental particle causes itself to go through this slit rather than that slit. So—even granted that these are examples of indeterminism in nature—these counter-examples to PSR would not count against a modified version of the principle (MPSR), that every event has some substance as its total or partial cause; that is, no event occurs unless some substance exercises causal influence to bring about the occurrence of either it or of some member of a set of alternative events (without determining which member). Although this principle, too, does not seem to be logically necessary, there are no examples of events that we reasonably believe to have no cause, either total or partial—with the one possible exception that I shall

[16] I must warn anyone familiar with my writing that I understand by the 'intermediate account' of God's necessity that I expound here a somewhat different account from the 'intermediate view' of God's necessity that I have defended in earlier writings. I have come to regard the latter as not significantly different from what I called there the 'weak view' and call here the 'weak account'.

[17] *Summa Theologiae*, Ia.3.4.

[18] G. W. Leibniz, *Monadology,* sect. 32, in *The Philosophical Writings of Leibniz*, trans. M. Morris (J. M. Dent and Sons, 1934).

discuss shortly. The more deeply we investigate any other apparently causeless events, the more frequently we find that really they have causes—while allowing that (probably) causation is often probabilistic and so that the fundamental laws of nature are statistical.

But is it not logically possible that a sudden explosion in London just happened without anything at all, even partially, causing it? Yes, but would it be reasonable to believe, if in fact such an event occurred, that nothing caused it? It would, I suggest, always be more reasonable to believe—that is, more probable—that it occurred, caused by some agent, either intentionally or in virtue of its powers and (maybe indeterministic) liabilities to exercise those powers. It would be more reasonable to suppose, for example, that substances of the kind that surrounded the place of the explosion, codified in laws of nature, had liabilities very occasionally to exercise powers to cause some member of a set of events including the explosion. Indeed, the normal interpretation of Quantum Theory allows stars or may be even galaxies very occasionally to cause some very large-scale event rather than some other such event, as a result of indeterministic processes.

The one plausible exception to MPSR is the ultimate cause of things, whatever that is. On an atheist view, this is the event of the universe existing, in the sense of the substance consisting of all substances apart from God existing, for as long as it exists (whether for a limited time or for ever). The atheist will normally regard that event as not caused by any substance, and so—if all causation is by substances—as an enormous exception to MPSR. The theist postulates—to my mind, on good grounds—a 'person' (in an analogical sense) and so a substance that causes this event, God; but, on the weak account of God's necessity, God's existence throughout beginningless and endless time, with his enormous power and knowledge, is in the end a brute fact, having no cause whatever. The only way to bring the existence of God, or—if there is no God—the event of the universe existing for as long as it exists, within the scope of causal explanation, and to avoid having to postulate the existence of God or the existence of the universe as an enormous brute fact, is to suppose that there is a kind of causal necessity that some particular substance (either God or the whole universe) exists, not as a result of being caused to exist by any other substance but by itself in virtue of its nature.

I have already argued in the previous chapter that, if there are good inductive arguments for the existence of a divine being if the supposition

of the existence of such a being is logically possible, then probably the supposition that there is such a being is logically possible. This involves supposing that, in analogical senses of these words, God is both a 'person' and a 'form' (or a fundamental law on the RBU account). As we saw in the previous chapter, a supreme form (or a most fundamental law)—that is, one on which all other forms or laws depend—could not come into being or cease to exist. So, if there is to be an explanation of why there is a supreme form, it must be in terms of itself; it must be essentially *causa sui*, the cause of its own existence. It could not, however, cause itself to exist by a causal act, for it would already have to exist in order to do this; and, as it exists always, there would be no time at which it does not exist. So the only way in which it could be the cause of its own existence is if it has an intrinsic causal necessity causing it to exist. Its existence would not be an effect of an act of that being, but a necessary property of the being, making it inevitable that it exists. This is indeed a strange and superficially paradoxical supposition. But only by postulating a causality of this kind can we avoid the conclusion that the enormous event of the existence of God occurs as a total accident. And to admit that would be to admit that not merely God, but all that the action of God explains, the universe and all that it contains, has no (total or partial) explanation. The alternative is to suppose that all events have at least a partial explanation in terms of the action of some substance or of some substance having an intrinsic causal necessity to exist. Let us call this intrinsic causal necessity 'ontological necessity'. MPSR now takes the form that there is at least a partial causal explanation of every event, in the sense that for every event there is a substance, the action of which or the possession of a property by which, explains why it occurred.

Leibniz saw that we must postulate a first cause that exists necessarily in order to explain the existence of the universe over time, but he supposed that this kind of necessity was metaphysical necessity (in my sense), and that—I have argued—it cannot be. Ontological necessity is not metaphysical necessity, because it remains metaphysically possible that there is no divine being, and so that God does not exist, in the sense that the proper name 'God' might not refer to any individual. But, on my account of metaphysical necessity, the fact that the existence of God is not metaphysically (and so logically) necessary amounts to the mere fact that the English sentence 'there is no divine being' and any synonymous sentence do not entail contradictions. Rather, ontological necessity is real

de re necessity; it is a causal necessity in the actual world, that in one all-important way it could not be other than it is. For all substances P apart from an ontologically necessary substance, (of logical necessity) either P is not caused to exist or P is caused to exist by P or something other than P acting at an earlier time. Either the existence of the earth or any other constituent of the universe is caused by itself or some other mundane substance acting at an earlier time, in my view themselves caused (totally or partially) by an act of God, or there is no cause of their existence. But if there is an essentially ontologically necessary being, God, he is caused to exist by himself in virtue of his essence for the whole time that he exists and so for ever, and all other substances are either caused or permitted to exist by God. Although only existing substances can have properties, and so having the essential property of ontological necessity cannot in a literal sense force God into existence, it can explain why, if he exists, he does exist.

I cannot give a direct or semi-direct argument to show that it is logically possible that there is a divine being who is essentially ontologically necessary. For clearly this claim involves giving an analogical sense, not merely to 'person' and 'form', but also to 'cause'. We must abandon the syntactic rule that if A causes *B*, then A is a substance whose action causes *B*. For what I am suggesting is that the possession by a substance of a property (a constituent property of the 'form' that is that substance) causes the simultaneous existence of that substance. We must, therefore, also abandon the principle of the direction of causation that is entailed, I argued in Chapter 9, by the rules governing 'cause', that a cause precedes its effect. The arguments of Chapter 9 for that principle depended on the assumption that causes were always substances exercising causal power, that is, acting so as to cause their effects, and so there is no reason to retain it in this case where the cause of the event of the substance existing (with its essential properties) is the substance existing (with its essential properties, including ontological necessity). We retain, however, the important rule that an effect does not precede its cause (for God's ontological necessity always exists at the same time as God), a rule abandoned in the larger alterations to the rules for 'cause' suggested by others, discussed in Chapter 4 and rejected in Chapter 9. This means that we retain our normal understandings of 'past' and 'future' and 'intentional action'. And we retain the rule that, if the cause of an event were not to have occurred, then—unless the event also had another cause or unless some other cause would have caused it in the absence of its actual

cause—the effect would not have occurred. Applied to God's essence, it entails that if—impossibly—God had not had that essence, including ontological necessity, he would not have existed.

We must again understand the semantic rules, so that 'the event of God being ontologically necessary causes his own (simultaneous) existence' resembles such paradigm examples as 'parents cause the existence of their children' or 'oxygen causes the existence of humans on earth at an immediately contiguous time', more than it resembles obvious examples of things that do not cause other things—children do not cause the existence of their parents, and humans do not cause the existence of oxygen on earth at an immediately contiguous later time. These significant alterations to the syntactic and semantic rules, however, have the consequence that it is initially unobvious whether it is conceivable that a divine being, or indeed any being at all, has such a property as ontological necessity.

While I cannot give a direct or semi-direct argument for the logical possibility that there is a divine being who is ontologically necessary, an inductive argument for this will take the same shape as the inductive argument discussed in the previous chapter. I argued there that, if arguments from the observable world make it somewhat more probable than not that there is a divine being with the properties discussed there, if that supposition is logically possible, then those arguments make it probable that there is such a being, and so that the existence of such a being is logically possible. I now argue that, if it would be somewhat more probable than not that the true explanation of the existence of all substances is that they are caused to exist by a substance that is ontologically necessary, if that supposition is logically possible, then probably that explanation is true and so logically possible. My reason for claiming that its essential ontological necessity makes the hypothesis that there is a divine being somewhat more probable than not is that it is simpler to postulate that the cause of all events apart from those entailed by its own existence is a cause of a kind similar to those events that it explains, in itself having a cause rather than being a causeless cause. And, as always, a simpler explanation is a more probably true explanation. (I also suspect that it is an a priori principle that it is (for any event) more probable that it is caused than that it is not caused. But I do not press this point.)

I emphasize that to claim that it is probable that MPSR applies universally, and so probable that there is a kind of causality other than causality by the actions of substances, is not to make a special plea for

theism. For any theory at all about what are the ultimate substance or substances that explain everything else will have to say either that the existence of those substances over all the time that they exist is uncaused or that they have a property of ontological necessity. On the theory that the only substances are physical substances, it would be very strange if every event that is caused to exist by them or happens to them should have a cause (whether or not deterministic), but that the universe consisting of those substances, existing for as long as it exists, has no cause; it is more probable that every event has a cause. And, as I discuss in *The Existence of God*, it is far simpler and so far more probable to suppose that only one being, God, has some essential property, rather than that every part of the universe has that property uncaused and coincidentally. But, leaving that point aside for the moment, my point in this book is that any theory of why there are the ultimate uncaused substance or substances that there are needs to postulate a further inexplicable causal necessity intrinsic to those substances.[19] It looks very improbable that the biggest event of all is causeless, while causality governs everything else. So, mysterious though ontological necessity is, any theory of the universe, not just theism, would seem to need to postulate it.

So, while I cannot give a direct or semi-direct argument to show that it is logically possible that there be an essentially ontologically necessary divine being, I can only say that—if it is logically possible—there would be a causal explanation of what would otherwise be an improbable enormous ultimate brute fact—that there is a divine being. But, in giving arguments in favour of the claim that it is logically possible and so

[19] A similar need arises if one supposes that there is a kind of causal explanation by laws ('laws' of the normal kind in no way analogous to a substance such as the 'form' that I am proposing), which (without operating on substances) bring substances into existence. A number of writers of recent years have supposed that there is such a law, an 'axiarchic' law, that brings substances and thereby events into existence because they are good; and so brings the universe (perhaps even including a god) into existence because it is good. See, e.g., John Leslie, *Value and Existence* (Basil Blackwell, 1979); Derek Parfit, 'The Puzzle of Reality: Why Does the Universe Exist?', *Times Literary Supplement*, 3 July 1992, repr. in P. Van Inwagen and D. W. Zimmerman (eds), *Metaphysics: The Big Questions* (Blackwell Publishers, 1998); and Hugh Rice, *God and Goodness* (Oxford University Press, 2000). I give my reasons for rejecting such explanations in *The Existence of God*, 47 n. 16. But if one did adopt such a theory, one would have to say that the law, being apparently logically contingent, either exists for no reason at all, or has the property of being ontologically necessary in my sense—it causes itself to exist.

conceivable that there is such a being, it remains the case that we humans cannot conceive what it would be like for it to be true; we cannot make sense of how there could be such a being—any more than we can make sense of how there can be particles that are also waves, or the community of humans born blind could make sense of how a surface can be 'loud'. We do not understand what it would be like for these things to be true, yet we have reason to believe that they are true. Likewise, although we cannot make sense of what it would be like for a divine being to be essentially ontologically necessary, we can understand the rationality of supposing that there is such a being.

The Essence of God

In previous chapters I have been analysing the properties that most theists attribute to God, and have claimed, while it is logically possible that a being can have most of those properties, including some essential properties, it could be logically possible that a being could have the properties of being divine (that is, 'essentially everlasting' and lacking thisness), and the property of being essentially ontologically necessary, only if we understand these properties as ones designated by predicates used in analogical senses. We can understand what it is for a being to be divine only if we understand that the being is both a 'substance' and a 'form' in analogical senses of these words. And we can understand what it is for a being to be 'ontologically necessary' only if we understand 'cause' in a sense such that the possession of a property can be a 'cause' of its possessor existing. But, while my arguments have, I hope, given reason to suppose that there are properties designated by certain predicates used analogically, I have not shown in intelligible terms what it would be like to possess such properties—any more than the physicists discussed in Chapter 4 have shown in intelligible terms what it would be like for an electron to be both a particle and a wave. Further, it may be that the properties that I have been discussing are possessed by God because he has some deeper sufficient property that entails them. I called the conjunction of the necessary and sufficient properties of God, and so the one essential property that entails and so underlies the others, the 'essence' of God. For God to exist would consist in the existence (in the same sense as substances exist) of that essence. But there is no reason to suppose that, even if we have quite good arguments for the existence of a

being having those essential properties thatI have analysed, we know all of what it is involved in being that essence.

So, I have argued, given good arguments for the existence of God, we know some things about God's essence. Aquinas also claims that we know some things about God's 'nature', which he understands in the same sense as God's 'essence' (*essentia*). After discussing God's simplicity, his goodness, eternity, omnipotence, and so on in *Summa Theologiae*, Ia.2–26, he ends this section with the sentence, 'these words are enough for matters relating to the unity of the divine nature'.[20] He has told us that God possesses every kind of perfection 'by nature' and so that he is, for example, 'by nature good',[21] that he is 'identical with his own eternity',[22] and that 'his act of knowing is his essence and his being'.[23] And he understands by the *essentia* of a thing whatever properties are necessary and sufficient for the existence of a thing of that kind.[24]

Why, therefore, does Aquinas insist that, while the Blessed in Heaven can 'see' God's essence, only very exceptionally can any human on earth 'see' that essence.[25] A major reason must be that our natural knowledge of the essential properties that he discusses 'has its source in the senses' (that is, is an inference from what we observe) and 'extends just so far as it can be led by sensible things'.[26] That is some 'knowledge', but it is not to be equated with the knowledge provided by a 'vision' of those properties. And my own account of why we cannot understand what it is like to have those properties is that we are limited in what we can conceive by concepts derived from sensory experience. Maybe as a result of a supernatural vision or in Heaven we could be in contact with God in a new way that (analogically) could be described as 'seeing' God, and then we could 'see' that he has these properties. Another reason why Aquinas claims that we are limited in our knowledge of God's essence may be that he thinks that God's essence includes further essential properties additional to those that we can attribute to God by reasoning from the observable world.

[20] *Summa Theologiae*, Ia.26.4.
[21] *Summa Theologiae*, Ia.6.3.
[22] *Summa Theologiae*, Ia.10.2.
[23] *Summa Theologiae*, Ia.14.4.
[24] 'Essence (*essentia*) or nature (*natura*) includes only what defines the species of a thing' (*Summa Theologiae*, Ia.3.3). Of course, for Aquinas God does not belong to a species or genus of which there can be other members; but Aquinas is clearly thinking of God's essence as the necessary and sufficient properties of a kind of thing, since this definition is used as part of his argument for God being identical with his essence.
[25] *Summa Theologiae*, Ia.12.11.
[26] *Summa Theologiae*, Ia.12.12.

But, in claiming that we could 'see' God's essence by a supernatural vision on earth or in Heaven, he is not claiming that thereby we could know everything about God. For he thinks that there is something that humans could never know about God—'no created mind can attain the perfect understanding that is intrinsically possible of God's essence'; it cannot 'comprehend him'.[27] Why not? Aquinas's reason is that, because God is infinite, nothing finite could fully 'grasp' him. I do not find Aquinas's reason a very satisfactory one, because humans can understand concepts involving infinity—for example, 'omnipotence', which involves unlimited and so infinite power. But Aquinas's claim suggests that, while he might think that one day, at least if given a supernatural vision, we might come to understand what it would be like to have all the 'properties' possessed by God, what he must think that we could never understand about God is why there is a God, which I have interpreted as why God is ontologically necessary. For to 'comprehend' something in Aquinas's sense involves understanding why it must be as it is.[28] So perhaps he would not count what I call God's 'ontological necessity' as a 'property' of God, and distinguishes between God's properties and what makes it the case that those properties exist. And it seems highly plausible to suppose that, while humans might come to understand far more fully than they can do now by natural reason what God is like, they cannot understand what it is for a being to have ontological necessity, and so to understand why God exists.

The Eastern patristic tradition, from Basil of Caesarea in the fourth century until Gregory Palamas in the fourteenth century, however, insisted that we could have no knowledge at all—either on earth or in Heaven—of the οὐσία of God—which, if it is translated into Latin as *essentia*, puts that tradition into conflict with Aquinas. Orthodox theologians usually claim that there is a conflict here, and that Basil and Gregory Palamas are right in claiming that humans cannot have any knowledge of God's 'essence', and that Aquinas is wrong in claiming that they can have some such knowledge. Yet there may not be a conflict

[27] *Summa Theologiae*, Ia.12.7.

[28] 'We do not comprehend a proposition that could be proved scientifically if all we have is a probable opinion about it: a man who can prove that the angles of a triangle equal two right angles may be said to comprehend this fact; but one that is merely of the opinion that it is so on the grounds that learned men say so or that it is commonly accepted, does not comprehend it' (*Summa Theologiae*, Ia.12).

here—it is just that Basil and Gregory Palamas do not mean by οὐσία what Aquinas means by *essentia*. The Eastern tradition held that we do know about God's 'attributes' or 'properties', which came to be called his 'energies' and to be hypothesized as 'the things about God'.[29] 'We know the greatness of God, his power, his wisdom, his goodness, his providence over us, and the justness of his judgement,'[30] wrote Basil. But we do not know to what these properties belong—the οὐσία of God; and indeed, Basil claimed, the same applies with regard to other humans—we know their properties but not their οὐσία.[31] The emphasis on the unknowability of God by Pseudo-Dionysius, characteristic of the Eastern tradition, is focused on the divine οὐσία. The οὐσία is one and simple; the 'energies', however, are very diverse: 'some are contingent, some necessary; some are temporal, some eternal; some are realities, or energies, others are activities, operations, or attributes. What could such a disparate group have in common? Simply that they are acts of self-manifestation.'[32] In Basil's list clearly 'God's providence over us' is temporal, a created essence—since we humans have existed only for a short period of time. But clearly, too, God's 'wisdom' and 'goodness' are eternal. And, while the necessary/contingent distinction (as opposed to the eternal/temporal, and uncreated/created distinctions) is not, I suspect, much in evidence in Eastern thought, Palamas in effect seems to think of the uncreated energies as belonging necessarily to God, but not as characterizing his οὐσία.[33] In calling the energies 'the things about God', he puts them, as it were, at a distance from the οὐσία.

Basil also clearly does not equate the οὐσία of a thing with its essential properties. For, in commenting that we do not know the οὐσία of an ordinary human, whom he calls 'Timothy', he writes: 'I know him according to his form and other properties; but I am ignorant of his οὐσία';[34] in claiming that he knows Timothy's 'form' (for example, as a rational being), he is claiming that he knows some of Timothy's essential

[29] For the understanding of God's 'energies' in the Eastern tradition, from Basil to Palamas, see David Bradshaw, *Aristotle, East and West* (Cambridge University Press, 2004), esp. chs 7–10.

[30] Basil of Caesarea, *Letter*, 234.

[31] See Basil of Caesarea, *Letter,* 235.

[32] Bradshaw, *Aristotle, East and West*, p. 273, expounding Palamas.

[33] 'You might as well claim that God is a creature as declare that his essential energies are created' (Palamas, *Triads*, III.1.23, trans. N. Gendle, in *Gregory Palamas, The Triads*, ed. J. Meyendorff (Paulist Press, 1983), 81).

[34] Basil of Caesarea, *Letter* 235.

properties. For Basil the οὐσία is rather what underlies the properties. Just as other humans do not know what it is that makes Timothy Timothy and so different from anyone else having the same essential properties, so humans cannot know what makes the divine being (without thisness) who is God God. There is presumably the vast difference that, even if humans could come to know the essence of another human, they could not ever come to know the essence of God. Palamas derives this view of the unknowability of the divine essence from the Eastern tradition, and so he is likely to have had the same understanding of οὐσία as Basil did.[35]

The Greek word οὐσία, so central to Greek philosophical and subsequent theological thought, has been used in several different senses, which has led to much misunderstanding in other contexts (and in particular about what different thinkers meant by the claim that the Son (Jesus Christ) is ὁμοούσιος with, that is has the same οὐσία as, God the Father.) Christopher Stead classified several different senses in which the word οὐσία was understood in the period from the second to fifth century CE.[36] Among these senses of a thing's οὐσία are both 'the category to which it belongs' and 'the stuff of which it is made'—what makes that individual that individual, the 'special character' or 'individuality' of a thing—as, for example, the particular chunk of matter of which it was composed that makes one table different from another table of the same pattern. Now, given that God does not have thisness, God's οὐσία cannot be the stuff of which he is made; and so it will have to be a property, but a property of a different kind from all the other properties of God, both those that we know and those that we do not know. It then follows that, since God alone can be divine and ontologically necessary, his οὐσία would be what grounds those divine properties, and above all his ontological necessity, and so makes him the kind of being, and also the individual, he is; and also causes his existence. That is what, according to Basil and Palamas, humans cannot ever know.

On what I have suggested was Aquinas's understanding of what it is to 'comprehend' God's *essentia*, Basil and Palamas could agree with Aquinas that humans on earth can know quite a lot about the essential

[35] See, e.g., Palamas, *Topics of Natural and Theological Science*, sect. 106, trans. in G. E. H. Palmer et al., *The Philokalia* (Faber and Faber, 1995), iv. 393–4.

[36] Christopher Stead, *Divine Substance* (Oxford University Press, 1977), ch. 6.

properties or 'energies' of God, and after this earthly life could come to know what they all are. And Aquinas could agree with Palamas that we could never know the οὐσία of God. If this is what they were both trying to claim, I agree with that claim. But I have no argument and I do not think that either of them has any very good argument that shows the limits to what humans can know, if they are not limited by their normal sensory experiences, concepts, and ways of reasoning, but are given by God a supernatural vision after death.

The final issue, to be discussed in the next chapter, is, if there exists a divine being who is (essentially) ontologically necessary, such a being as I have been describing in this book, what should be our attitude towards him.

15

Holy and Worthy of Worship

In Part II and the first two chapters of Part III I have discussed the logical possibility of various claims that theists make. In Part II I argued that it is logically possible that there exists an eternal omnipotent person, so long as 'eternal' is understood as 'everlasting', and 'omnipotent' is understood in sense [ϵ], from which it follows that that person is an omnipresent spirit, perfectly free, the creator of any universe, omniscient (in the weak sense), perfectly good, and a source of moral obligation. My arguments that that is logically possible in no way relied on supposing that words are used in analogical senses. In the first two chapters of Part III I argued that it is logically possible that there exists a person of the kind analysed in Part II who has the above properties essentially, and is essentially ontologically necessary. However, these arguments require us to understand various words in analogical senses. Given that the words are so understood, I was unable to prove in any direct or semi-direct way either that this claim is coherent or that it is incoherent. However, I pointed that there could be an inductive proof of the coherence of this claim in so far as, on the assumption that it is coherent, there is inductive evidence for the truth of the claim.

Various theologians who would rightly be called 'theists' have, however, held somewhat different views from each other about the nature of God. Some of these theologians have held slightly 'stronger' views about that nature than the one that I have developed, and ones correspondingly more difficult to comprehend, but ones that they felt to be more deeply embedded in the Christian (or Jewish or Islamic) tradition than mine. In particular, they have held different views about God's omniscience, his eternity, and his necessary existence from the ones that I have developed. I have given arguments for regarding these rival views either as incoherent,

or as such as to entail unwelcome consequences for theism. A major reason why theologians have held some of these rival views is one to which I have alluded from time to time—that only on those views would God be so great as to deserve worship. I shall argue in this chapter that, if there is a God who has the nature that I have analysed, he would indeed be worthy of worship.

Worthy of Worship

I argued in Chapter 11 that, if there is an omnipotent person who has given to each of us a life, and all the good things that it contains, subject to a condition that we should use it as he commands us to do, we have a duty to express great gratitude to him and to fulfil any commands that he has issued. In the view of the major theistic religions, we owe him gratitude not merely for our life and the good things that a normal life contains, but also for his interventions into the ongoing history of the human race. Different religions have different views about what these interventions are. But, for a Christian, the great intervention is God himself acquiring a human nature and living on earth as Jesus Christ, revealing to us deep truths, dying on the Cross to share human suffering and to make available to us atonement for our sins, and rising from the dead to show us that he was God. All of this, if it happened, would deserve enormous gratitude. But, while the worship of God (as depicted in theistic religions) involves great gratitude, there is more to worship than the expression of gratitude.

What is it then to worship a being with the kind of worship that theists offer to God. To offer worship of this kind to some being is surely to show the greatest possible explicit respect towards that being. It is good to show a certain explicit respect to any human person with whom one has contact, just because he is a person. It is good to show this respect, because persons have feelings and moral awareness, and because they intentionally influence themselves, each other, animals, and the inanimate world. Such respect is, I suggest, especially appropriate if (as many of us believe) human persons have libertarian free will—that is, if to some extent what we do depends ultimately on us and not totally on our genes, upbringing, and environment, or on God. No one expressed better the obligation to treat other rational beings (including humans) with respect than did Kant. A rational being must regard himself, Kant claims,

as a member of a 'kingdom of ends', the 'ends' being the other rational beings who are 'ends in themselves'. Kant claims that 'all rational beings stand under the law that each of them should treat himself and all others, never merely as a means, but always at the same time as an end in himself'.[1] Treating other persons as ends in themselves of course involves many things. It involves not killing them without just cause, and not stealing from them property or spouses. It also involves, I suggest, showing them explicit respect when we come into contact with them. We show explicit respect to persons in many ways. We shake hands with them, or smile at them, or say friendly words to them. We open doors for people that they could have opened for themselves, listen to what they have to say when we are not immediately interested in their conversation, reply to their letters when we have nothing relevant to their or our immediate needs to say to them. In sum, showing respect to people involves treating them with courtesy, and it is good to do this.

But do we have a moral obligation to do these things? Kant certainly thought that we do. Someone may admit that he has moral obligations of cruder kinds to his fellows, such as paying his debts to them or not injuring them, but deny that he has any obligation to pay them explicit respect. Whether or not there would be this latter obligation if there were no God, I am unsure. But, I suggest, if there is a God who is the creator not merely of ourselves but of every human being, we owe it to God who has created us to treat with respect other humans whom he has created, just because he has created them.

There is clearly a stronger case for a duty to pay explicit respect to benefactors. It goes with the duty of doing what pleases the benefactor that I discussed in Chapter 11. By virtue of their status, benefactors who have done much for us are entitled to a special degree of respect. We show this by our mode of address, by giving them places of honour, perhaps by the occasional present. Sometimes to show him or her respect is the only return one can make to a benefactor for what he or she has done. If someone thinks that there is no obligation on the recipient of a benefit to show respect to a benefactor, they should reflect on the fact that all societies from Tsarist Russia to Communist China, from primitive tribes to capitalist USA, have shown such respect and thought it right

[1] I. Kant, *Groundwork of the Metaphysic of Morals*, trans. H. J. Paton under the title *The Moral Law* (2nd edn, Hutchinson and Co., 1953), 101.

to do so. They give to benefactors medals, or titles, or dinners, or 'benefit matches' when they retire and are too old to confer further benefit—which shows that there is not too obvious a crude selfish motive for the conferring of such respect. A society that did not recognize its benefactors would surely be a morally worse society than one that did. The greater the benefit that we receive, and the more costly it was for the benefactor to give it, the greater the respect that he or she deserves. By contrast, in so far as there is a selfish motive for the benefactor's behaviour (for example, in so far as he acts simply in order to gain our explicit respect or to gain a reward from some other person), the less he deserves our respect. From the general duty of respect to benefactors there follows an especially strong duty of respect to those on whom we depend much for our existence, our growth, and flourishing, above all to our parents but also to those who govern our countries—kings and presidents, prime ministers and executive officials—so long as they are good people and govern well.

There are clearly special duties of respect that we have to those with whom we have particularly intimate relationships, and this means two classes of people—those who have given to us what they do not give to others, some specially intimate personal aspect of themselves; and those who are what they are largely because of how we have made them. For the first reason there is a special duty of respect owed to parents, and to wife or husband. One who failed to show explicit respect to his spouse who had given so much uniquely to him would indeed deserve condemnation. For the second reason, I suggest, there is a special duty to show respect to all those who are what they are because of the way in which we have influenced them, in particular to our children, who have been formed by us who are so ignorant of what kind of life would be best for us to provide for them, and are such unsatisfactory promoters of even our limited vision of what would be best for them. We owe it to them, because to some considerable extent we have made them (not through their own choice) the way they are. And, of course, it follows from that that God owes us a certain respect, even though he—unlike human parents—has formed us in the light of knowledge of wherein our true well-being consists. He shows us this respect if he gives us libertarian free will (as I am assuming) and (as is evident) much responsibility for our own lives and the lives of others, and, like a good parent, does not immediately interfere if we abuse that responsibility.

It is clearly good also to show respect to persons who are good persons and who have done great things, even if they are not closely related to ourselves. And, if they belong to and so have enriched the society of which we are members and which has benefited us a lot and so to which therefore we owe much, then—I suggest—we have a special obligation to show them respect. The wise, the good, and the brave deserve recognition by us, even though they have not especially benefited ourselves. He who saves the life of another, educates the young well, finds out the secrets of the universe or of the past history of humans, who runs fast or flies high, sings, paints, or writes well, deserves to be acknowledged for these things by his fellows—even though he has not benefited those fellows in any direct way by these activities. A society that recognizes only direct benefit to itself is obviously morally poorer than one that recognizes also greatness and great achievement as such. A society that does the latter does not merely recognize its members as persons but recognizes them as the persons that they are, and values them for that too. It is for reasons such as these that the old are deserving of special respect. They have done much and suffered much, learnt much and handed on their knowledge. A duty to respect any person for his beneficence to us or for his greatness or other features would, of course, be lessened or no longer exist if that person was morally bad, and in particular if he was exercising his beneficence or greatness in ways in which he had no right to exercise them. A person who gave us what he had stolen from someone else, or exercised a sovereignty that he had achieved by murdering the rightful claimant to that sovereignty, deserves no respect. Persons deserve respect peculiar to their status and achievements. To pay the same kind of respect and the same amount of respect to all people would not be to show recognition of the features for which each particular person deserves respect. To treat children with the same kind of respect as parents would not be to recognize the features for which they deserve respect.

I argued in Chapter 11 that, if there is a God of the kind that I have been analysing, we owe him obedience—to do whatever he commands (though there are limits to what he has the right to command, and so will command). Further, such a God would be—as I emphasized in Chapter 11—our supreme benefactor, and also the supreme benefactor of all humans (the society to which we belong). All that we have and are are due to him, except what comes to us from other humans who exercise their free will, and then their ability to benefit us is due to him. He is the ultimate creator of all things, including the beauty of the earth and of

'the starry heavens above'; and the supreme influence on history, controlling all its development except in so far as he allows humans significant freedom to influence that. Being omniscient, he knows everything, compatibly with the continued free exercise of his power. He has given to us the faculties of observation and reasoning that enable us to understand the deep truths of science and of morality; and, in the view of the great theistic religions, has intervened in history to reveal directly to us many deep truths about himself and ourselves that we would not have been able to discover for ourselves. And, of course, if he has interacted with us in the particular way that Christianity affirms—becoming incarnate, sharing our suffering and making atonement for our sins, that provides a very special kind of reason for showing him respect. If we so choose, we can be in constant interaction with him; being omniscient, he is aware of our secret thoughts, and, being omnipotent, sustains us from moment to moment. He hears and responds to our prayers. He is also perfectly good.

The incomparable greatness of God in having these great-making properties to maximum degrees—he is the complete benefactor, the ultimate creator, who can do everything and knows everything—should surely make it obligatory to show him a degree of respect incomparably greater than that due to any human, indeed the greatest possible respect that could be shown to anyone, and to a kind of respect, not due to those whose degree of these properties largely depends on influences outside their control. We should regard him with awe. To show to God that kind and degree of respect is, I suggest, what it is to worship God.[2] It would, of course, be good if the feeling of awe comes to us naturally, and so we have a spontaneous urge to worship; but, if this does not happen, that feeling can, like all proper feelings, to some extent be cultivated. And, although it should not need God to command us to worship, he may need to

[2] 'Honour is due on account of excellence. Since God infinitely surpasses and completely transcends all other things his excellence is unparalleled. Therefore he should receive a special kind of honour; as in human affairs we give different kinds of honour for different types of excellence, one for a parent, for example, another for a king and so on' (Aquinas, *Summa Theologiae*, IIa.2ae.81.4). Aquinas here in effect rightly urges that deserving worship is a 'threshold obligation'—that is, that the obligation is supervenient on having another property to a degree beyond some 'threshold'. This latter is argued by Jeremy Gwiazda, 'Worship and Threshold Obligations', *Religious Studies*, 47 (2011), 521–5, who claims that the obligation could arise from having a maximum degree of excellence.

command this—just as parents may need to command their children to show them proper respect.[3]

In various places I have rejected suggestions that my account of God would make him less great and so less worthy of worship than some rival account. I argued in Chapter 8 that it does not lessen God's greatness, if he gives to other beings the power to create substances, so long as those beings exercise their creative power only in so far as he permits them to do so; it follows from definition [ϵ] of God's omnipotence that that will be the case. Nor, I argued in Chapter 9, does it lessen God's greatness that he is unable to exercise his power in irrational ways, in particular 'to do evil'. For God can know fully what he is doing only if he recognizes which actions are morally good and which are morally bad. To recognize an action as morally good involves having an inclination to do it, and to recognize an action as morally bad involves having an inclination not to do. So he could do what is bad only if he were subject to irrational influences beyond his control; and that would make him less in control of the world. I considered and rejected in Chapter 12 the suggestion that an everlasting God would not be as great a being as a timeless creator, on the ground that he would not be so much in control of the world if there was a period of time (the past) beyond his power to control. In rebuttal I suggested that for a timeless God every period of time would be beyond his power to control, since in his timeless moment he would see it as it is, and he could not then make it any other way. By contrast, an everlasting God can control an infinite future. For a similar reason I reject the suggestion that God who was omniscient only in the weak sense would not be as great a being and so much in control of the world as a God who was omniscient in the strong sense. For a God who was omniscient only in weak sense would have before him at any moment a future that would not be fully fixed; he would always be able to go on making differences to the world. But again, if the future was fully fixed, it would lie outside God's power to control, and so he would be a less ultimate source of what happens. And in Chapter 14 I pointed out that God would not deserve

[3] Contrary to T. Bayne and Y. Nagasawa, 'The Grounds of Worship Again: A Reply to Crowe', *Religious Studies*, 43 (2007), 475–80, who claim (p. 478) that 'it is hard to imagine theists conceiving of their act of worship as grounded in the commands of God'. That article is a follow-up to T. Bayne and Y. Nagasawa, 'The Grounds of Worship', *Religious Studies*, 42 (2006), 299–313, which is sceptical about there being an obligation to worship. The points made in my text respond to their sceptical doubts.

our worship unless we suppose that his omnipotence and perfect goodness are essential properties of God.

God's greatness as creator and influencer in history is, since he is essentially eternal and omnipotent, such that, not merely has he created and sustained in existence, and does and will create and sustain in existence everything that happens, but—we saw in Chapter 14—given that there is such a God as I have been analyzing—nothing could exist without God. And, as I developed the idea in Chapter 14, his greatness is not merely such that he does not depend on anything else for his own existence (and so is necessary in the weak sense). Rather, I suggested there, he is necessary in the intermediate sense that he exists as a result of having an intrinsic causal necessity to exist.

In a well-known article, J. N. Findlay argued that it would be quite unsatisfactory from the religious standpoint if the god whom we worship 'merely *happened* to be wise, good, powerful and so forth, even to a superlative degree, and if other beings had, *as a mere matter of fact*, derived their excellences from this single source'. And he went on to claim that, to be worthy of worship, a being must be such that 'his own non-existence must be unthinkable in any circumstances'.[4] By 'unthinkable in any circumstances' Findlay probably meant 'logically necessary' in my sense. From that he concluded that there can be no god of what he assumed to be the normal theistic kind. In defending the claim that there can be a person who has the divine properties essentially, I have defended the claim that it is logically possible that there is a person who does not 'merely happen to be wise, good, powerful, and so forth, even to a superlative degree' and such that it is logically possible that other beings do not '*as a mere matter of fact* derive their excellence from this single source'. While I agree with Findlay that it is not logically possible that there be a person who exists of logical necessity and so there cannot be a person whose 'own non-existence' is 'unthinkable in any circumstances', I have argued that all that that amounts to is that the sentence 'there is no God' does not entail a contradiction. Yet it does not follow that God exists by chance or accident. I have argued that (probably) it is logically possible that God exists because God has an intrinsic nature such that

[4] J. N. Findlay, 'Can God's Existence by Disproved?', *Mind*, *57* (1948), 176–83 (emphasis in original).

causally he could not exist; and in that case it would not be a matter of chance or accident that there is a God.

James Rachels has argued that 'no being could possibly be a fitting object of worship, since worship requires the abandonment of one's role as an autonomous moral agent'.[5] An autonomous moral agent is one who works out for himself what to do and follows his own conscience; he does not blindly follow someone else's commands. In arguing that we ought to obey God's commands, I was arguing that 'objectively' that is our obligation, whether or not we recognize it. Of course someone can be guided in his actions only by what he believes to be the case; and, if someone does not believe that he ought to obey God's commands, he is surely not blameworthy for not doing so—any more than a person is not blameworthy for not paying his debts, if he does not believe that he has those debts. So, of course, we must work out for ourselves what to do, and follow our own conscience. But our investigation may lead us on good grounds to believe that sometimes we have obligations to obey the commands of other humans, such as our parents or the state. Similarly, our investigation may lead us on good grounds to believe that there is a God who is entitled to our obedience, and then our conscience may tell us to do what he commands (which will often, but not always—see Chapter 11—be what we ought to do anyway for reasons other than that he commands it). In deciding whether or not to follow our conscience we remain autonomous moral agents.

I conclude that a God who is divine, and is essentially ontologically necessary (that is, God as described in my final analysis in Chapter 14), would be not merely worthy of worship, but a being whom all humans ought to worship. What kind of behaviour will constitute such worship will depend on the conventions in the society for showing respect. One way of showing such respect is by explicit confession in words of that being's status and of man's nothingness with respect to him. Another way is bowing or genuflecting before some representation or believed manifestation of his presence.

Holiness

In his classic *The Idea of the Holy* Rudolph Otto analyses what he regarded as the feelings that make up the religious attitude, and so the

[5] James Rachels, 'God and Human Attitudes', in P. Helm (ed.), *Divine Commands and Morality* (Oxford University Press, 1981), 45.

kind of God towards whom it is appropriate to have them. Otto distinguished the personal properties of God, on which my account of God has concentrated in Part II of this book, from his non-personal properties—a distinction that he seems to identify with a 'rational'/'non-rational' distinction. While acknowledging that being holy involves perfect goodness, he sought to analyse the other aspect of holiness, connected with the non-personal, 'non-rational' aspects of the being worshipped, which he called the 'numinous'. Recognizing this aspect of God should evoke in humans feelings of 'creature-consciousness'[6] and 'awe'[7] at something having 'absolute overpoweringness'[8] and that is 'wholly other'.[9] Despite what Otto seems to claim, some of these feelings are appropriate responses to the personal being whose properties can be analysed in the way in which I have analysed them. Otto distinguished the feeling of 'creature-consciousness' as 'the emotion of a creature, submerged and overwhelmed by its own nothingness in contrast to that which is supreme above all creatures'[10] from a mere feeling of dependence on a superior being. But while, of course, to recognize one's dependence as total dependence is rather different from recognizing it as partial, it is not totally different; and I suggest that a true appreciation of the greatness of the God whom I have analysed in this book would indeed properly involve the feeling of 'creature-consciousness' that Otto describes. Likewise, too, in postulating that God's essence involves an intrinsic causal necessity, I am indeed postulating something 'wholly other', mysterious and incomprehensible. Some of the characteristics mentioned above are consequences of the respects in which the God analysed in this book is not a person, but a 'form', and so Otto is right to treat them as 'non-personal', though not for that reason 'non-rational'. Kant has described well the enormity of what the theist is claiming when he attributes necessary existence to God (although for Kant it is a necessity of a different kind from that which I have suggested):

> Unconditioned necessity, which we so indispensably require as the last bearer of all things, is for human reason the veritable abyss. Eternity itself, in all its terrible sublimity, as depicted by a Haller, is far from making the same overwhelming

[6] Rudolf Otto, *The Idea of the Holy*, trans. J. W. Harvey (Oxford University Press, 1958), 10.
[7] Otto, *Idea of the Holy*, 14.
[8] Otto, *Idea of the Holy*, 19.
[9] Otto, *Idea of the Holy*, 25.
[10] Otto, *Idea of the Holy,* 10.

impression on the mind; for it only *measures* the duration of things, it does not *support* them.[11]

Yet two other features of God's holiness as Otto analyses it are that he is 'urgent, active, compelling, and alive'[12] and 'overabounding',[13] and these seem to me—despite Otto's wish to regard them as 'non-personal'—as properties characteristic of a person, and ones that belong to the God analysed in this book. A being who acts in time, as I have postulated, and can therefore respond to the human condition with anger and mercy, would therefore have the kind of vitality or energy that Otto describes and sees as an essential feature of the 'living' God of the Bible, in contrast to the timeless unchangeable entity postulated by the scholastics. God's 'overaboundingness' is the feature recognized in 'those great experiences—of grace, conversion, second birth'.[14] And these experiences, at least in what Otto calls their 'Christian form', are certainly experiences of interaction with a personal being, and a personal being who may be angry, forgiving, and loving, attitudes possible for a temporal being but not for a timeless being, for the reason given in Chapter 12. The holy is something, as Otto describes it, closeness to which would give man his fullest happiness, complete satisfaction, perfect bliss. Although this does not follow directly from the account of God given in the present book, it would not be surprising if man's deepest longings would be satisfied by closeness to such a God. For humans are not solitary animals; we seek to share our life with others. We value the company of other persons for their goodness, their interestingness, and their spontaneity. Yet we often finds other human persons profoundly unsatisfying, simply because they do not have enough of those characteristics for which we value persons. They are in part mean and selfish, dull and of limited understanding, predictable and never achieve much. It would not, therefore, be surprising if ultimate satisfaction for a human was to be found in union (of a kind that does not eliminate his individual identity) with a person who, being perfectly good, did not spoil his companionship by being mean or selfish; who, being omniscient, would always have interesting things to tell us that he could see in virtue of his deep understanding of how things are; and who, being omnipotent

[11] I. Kant, *Critique of Pure Reason*, B641.
[12] Otto, *Idea of the Holy*, 24.
[13] Otto, *Idea of the Holy*, p.38.
[14] Otto, *Idea of the Holy*, 37.

and so perfectly free, would be unpredictable, ever a source of novelty, and the ultimate source of all things.

So, despite Otto's unwillingness to see the features that he—to my mind, rightly—sees as making a being holy, as features rationally conceptualizable, I suggest that they are all involved in the God that I have sought to analyse in this book. Such a being, if he exists, would be not merely worthy of worship, but truly holy.

Conclusion

I have developed in this book a view of the nature of God that is, I believe, close to traditional Christian and other theistic accounts of that nature—that there is a God who is essentially everlasting, omnipotent, lacks thisness, and is ontologically necessary. I have been unable either to prove this doctrine in its entirety to be coherent or to prove it to be incoherent by normal direct or semi-direct means. This is because some of the words in which the doctrine is expounded are words used in analogical senses, and when a claim is expounded in such words it is very difficult to prove its coherence or incoherence by normal means. However, I have argued that, if we had good inductive evidence (on the assumption of its coherence) for the truth of this account of theism, we would thereby have evidence of its coherence. Only by such a route is there a hope of showing coherence.

How ought atheist and theist to regard this conclusion? The atheist, I think, ought to regard it as a demonstration that traditional theism is a more subtle doctrine than many atheists have supposed, and one that cannot be defeated by a priori arguments of the kind considered in this book. The best hope for the atheist is to show that the total available evidence (including such apparent counter-evidence as the existence of evil) does not make it somewhat more probable than not (even on the assumption that it is coherent) that there is a God.

The theist, however, ought not to regard the conclusion of this book as in any way a setback for his claims. It is, on the contrary, just what long traditions of theological thought would lead him to expect. Clearly, he must believe that his claims are coherent and so cannot be proved incoherent. But, if there were a straightforward proof of their coherence, this would mean, as we saw in Part I, that the claims of theism could be spelled out at greater length in sentences, the meaning of which humans

could grasp fully and understand completely. Yet theologians of all theistic traditions have long emphasized the inability of humans in any way fully or adequately to understand what is being said when it is claimed that there is a God. But, even if a direct or semi-direct proof of the coherence of some proposition cannot be given, that does not mean that someone may not reasonably believe it to be coherent. For, as we have seen, clearly he may do so, if (on the assumption that it is coherent) he has good inductive grounds for believing it to be true. Whether the theist has such grounds is the topic of my subsequent book, *The Existence of God*. A long tradition of Christian thought has maintained that there are such grounds. Those in this tradition maintain that there are reasonable grounds for believing a proposition that they far from fully understand—the proposition that there is a God.

To claim that there is such a being is not to claim that we can conceive, fully understand, make sense of the ontological necessity of a being who is in analogical senses both a 'person' and a 'form' that underlies the traditional properties that I have analysed in this book. But what I claim to have shown in this book is that if—as I argue in the *Existence of God*—there are cogent arguments from the nature of the observable world that, if the concept of such a being is coherent, make it somewhat more probable than not that there is a God, that concept is coherent. And—given that some words are understood analogically—we can know to some extent what we are talking about when we talk about 'God'. That is not to deny that we might understand this a lot better if our understanding obtained from understanding ordinary words is filled out by a deep religious experience; or, above all, by the 'Beatific Vision' in the world to come. But, with Thomas Aquinas and Basil of Caesarea, I see no reason to suppose that we could ever fully understand what it is to be God and why such a being exists. Maybe some truths about God involve concepts that only God can grasp.

Additional Notes

A. Omnipotence, Omniscience, and 'the relativity of simultaneity' (see Chapter 9 note 9)

The traditional interpretation of the equations of Special (and so General) Theory of Relativity claims that they show that temporal relations between events that are not causally connectible are relative to a frame of reference, from which it follows that any such event that is earlier than some other event in one frame is simultaneous with it or later than it in another frame. (Two events are 'causally connectible' iff a signal sent from one can reach the place of the other at or before the occurrence of the latter.) If this is the correct interpretation of those equations, then my claim in Chapter 9 about 'the primitive source of our grasp of the concept of temporal succession' must be read as concerned only with the source of our grasp of the relation of temporal succession between causally connectible events. (On Relativity Theory an event γ that is causally connectible with another event ϵ, which is earlier than ϵ in one frame, is earlier than it in all frames.) Reading my claim in this way will not in any way affect the argument that I am about to give against the possibility of either simultaneous or backward causation. However, all accounts of omnipotence assume that God can cause any event anywhere immediately after his causing it, and knows about (and so on the view I develop in Chapter 10, is caused to know about) every event everywhere at any time immediately after its occurrence. It follows that an event at T could cause God's knowledge of it immediately after T, and God could, immediately after acquiring that knowledge, cause some human immediately thereafter to know that that event had happened, even if the event and the human's knowledge of it occurred at places so far distant from each other that—on the normal interpretation of the equations—these events are not causally connectible with each other. If so, then God would have to violate the laws of Relativity Theory in order to convey information so quickly. However, I do not see any need to interpret those equations in the traditional way. I have argued elsewhere that the equations of Relativity Theory are perfectly compatible with measurements in one particular frame of reference providing the one correct standard of simultaneity, which would allow all non-simultaneous physical events to be causally connectible by some means (although not by means of a light signal). See my 'Cosmic Simultaneity', in W. L. Craig and Q. Smith (eds), *Einstein, Relativity, and Absolute Simultaneity* (Routledge, 2008).

B. The Content of a Belief as its 'narrow content' (see Chapter 10 note 10)

A belief is the belief it is in virtue of who has it and what is its content—that is, what is believed by the believer, but that content may be described in different ways. Thus my belief that 'there was a Greek called "Alexander" who was a great general' may be described by those who believe that there was such a person as Alexander as my belief that 'the Greek called "Alexander" was a great general'. But, while I could believe the former sentence, even if there was not such a Greek, I could not believe the latter sentence if there was no such person—the latter sentence presupposes that there was such a person. This difference is sometimes described as a difference between beliefs of two kinds that we may have—'narrow content' beliefs (for example, the belief that 'there was a Greek called "Alexander" who was a great general') and 'wide content' beliefs (for example, the belief that 'the Greek called "Alexander" was a great general'). But there are not two such kinds of belief; there are merely two different ways of describing a particular belief. A 'narrow content belief' is a belief in which the content is described in a way that does not presuppose anything outside the mental state of the believer. A 'wide content belief' is a belief described in a way that does presuppose something outside the mental state of the believer; such a 'belief' is always a redescription of a 'narrow content belief'. In the discussion of God's omniscience we are concerned with whether the contents of God's beliefs to which he has immediate mental access are all true; and so my claim in the text is that a belief at a time, individuated by its narrow content, is a hard event at that time. Although, in order to avoid too complicated an exposition, I have often in the text given wide content descriptions of beliefs, I ask the reader to assume that when, it is relevant to the hardness of a belief, the belief is the belief it is in virtue of its narrow content.

C. The Christian Doctrine of the Trinity (see Chapter 13 note 10)

If, in the way described in Chapter 13, there was more than one divine being, and any other divine beings depended on the first divine being for their existence while the first divine being did not depend on the other divine beings for his existence, the first divine being (as well as the whole community of divine beings) would be independent of anything else for his existence. But it is possible that, while the first divine being actively causes the existence of other divine beings, the latter (because it is a unique best act to do so) permit (cause by not acting, what I call 'passively cause') the existence of the first divine being. In that case, the divine beings would be mutually dependent on each other, and so the first divine being would not be an independent divine being. I explored the whole issue of

whether there can be more than one divine being—that is, in the analogical sense more than one divine 'person'—in my book *The Christian God* (Oxford University Press, 1994). (I regret that I explored this issue there, using a different terminology from that used in the present book. In *The Christian God* I called an independent being an 'ontologically necessary' being, and a being necessarily caused to exist by an independent being a 'metaphysically necessary' being, using this latter expression in a totally different sense from the one that it has in this book and that is common in analytic philosophy.) The conclusion briefly suggested in Chapter 13 that there can be more than one such person iff any other divine persons are dependent in a certain way on a first divine person clearly suggests one interpretation of the Christian doctrine of the Holy Trinity: that there are three co-acting divine persons, one of which is the source of the divinity of the other two . In *The Christian God*, I suggested that the members of the Trinity would be mutually dependent, but in Chapter 2 of a short later book, *Was Jesus God?* (Oxford University Press, 2008), I suggested the simpler model of all other divine beings being dependent on the first divine being without any reciprocal dependence. I think that either model is compatible with the Christian doctrine of the Trinity.

D. Ontological Arguments (see Chapter 14 note 6)

The simplest version of an ontological argument is that given by Descartes in his *Meditations*—see Meditation 5. In essence it has two premises—'God is an all-perfect being' (a definition of God), and 'anything is more nearly perfect if it exists than if it does not'—which—Descartes claims—entail the conclusion 'God exists' . For a new ontological argument, see A. Plantinga, *The Nature of Necessity* (Oxford University Press, 1974), ch. 10, expressed less technically in A. Plantinga, *God, Freedom and Evil* (George Allen and Unwin, 1975), 85–112. The best-known criticism of ontological arguments is Kant's criticism of the premiss common to Anselm's argument and Descartes's argument that a being that exists is more perfect than one that does not exist. Kant denied this premiss on the ground that 'existing' is not a property that some individual thing can have or not have—because a thing that does not exist could not have or not have any properties; and so 'existing' could not make anything more perfect than it would otherwise be. See Kant, *Critique of Pure Reason*, B620–30. If I am right to claim that it is not logically possible that there be a logically necessary being, then necessarily all ontological arguments will fail. For ancient and modern ontological arguments and criticisms of them, see, e.g., the collection edited by A. Plantinga, *The Ontological Argument* (Macmillan, 1968). For a very careful analysis of where various ontological arguments fail, see Jonathan Barnes, *The Ontological Argument* (Macmillan, 1972).

E. Aquinas on Divine Necessity (see Chapter 14 note 8)

Many commentators have supposed that, by such phrases as 'God is his own essence' and also 'his own being', Aquinas was advocating the same view of divine necessity as the view that I have found in Scotus. I argue, however, later in Chapter 14, that these phrases of Aquinas should be understood in rather different ways. Aquinas distinguishes elsewhere between the conditionally necessary and the absolutely necessary, and claims that the latter 'is reckoned to be such from the implication of the terms, as when a predicate is entailed in the definition of a subject' (*Summa Theologiae*, Ia.19.3). Since he clearly holds that God's necessity is not merely 'conditional', that might suggest that he holds it to be logically (or at least metaphysically) necessary in my sense. The trouble with this natural interpretation is that Aquinas thought that anything incompatible with what was already fixed entailed a contradiction; he held that what is 'absolutely possible', and so presumably what is 'absolutely necessary', changes with time. God, as the eternal source of everything, is always fixed, and so—by these criteria—that is why he is absolutely necessary, and not because his non-existence involves a contradiction. (I am indebted for this analysis of Aquinas's understanding of modal concepts to Brian Leftow. See his paper 'Aquinas, Divine Simplicity, and Divine Freedom', in K. Timpe (ed.), *Metaphysics and God* (Routledge, 2009).)

F. Leftow on Divine Necessity (see Chapter 14 note 14)

Brian Leftow's very thoroughly argued book *God and Necessity* (Oxford University Press, 2012) defends the view that some necessary truths are made true by the divine nature—for example, the truths about the kind of being that God is, and also the truths of logic and mathematics; whereas other necessary truths are brought about by the will of God—for example the truths about which kinds of things (for example, red things or quarks) are metaphysically possible, and what essential natures individuals have (for example, whether Socrates is an animate being). (I replace Leftow's example of 'Socrates is human', because I do not think that it is necessary that Socrates is human; he might become a monkey, but he could not cease to be an animate being without ceasing to exist.) My arguments in Chapters 2 and 3 suggest that a division of this kind between two kinds of metaphysically necessary propositions is entirely arbitrary. We have just the same kinds of reason to believe that it is metaphysically necessary that 'Socrates is an animate being' as to believe that '1 + 2 = 3'—that is, that, when we substitute co-referring informative designators for uninformative ones, the negation of the proposition expressed by the sentence entails a contradiction. Clearly the word 'Socrates' in the relevant context designates an essentially animate being, and so

the sentence 'Socrates is an animate being' reduces to a sentence of the form '[a certain essentially animate being picked out in a certain way] is an animate being'. And, given the definitions '1','2','+', and '3', which define the essences of these terms, the negation of '1 + 2 = 3' entails a contradiction. My arguments in the text count against Leftow's accounts of the source of the necessity of both these kinds of propositions.

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